



BRONX COMMUNITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK
ARTICULATION AGREEMENT FORM

A. SENDING AND RECEIVING INSTITUTIONS

Sending College: **Bronx Community College of the City University of New York**

Department: Chemistry and Chemical Technology

Program: Liberal Arts and Sciences, Earth Systems and Environmental Science Option

Degree: Associate in Science

Receiving College: **York College of the City University of New York**

Department: Department of Earth and Physical Sciences

Program: Geology

Degree: Bachelor of Science

B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

(e.g., minimum GPA, audition/portfolio):

Admission

- Students must complete the on-line CUNY Transfer Application (October 1 for Spring Admission; February 1 for Fall Admission)
- Bronx Community College (B.C.C.) graduates are exempt from all lower-division General Education Degree Requirements.
- To earn the Bachelor's Degree at York College B.C.C. graduates must complete the courses required for the major, one upper level General Education course, one writing intensive course within the major and elective courses.

About the Program

Geology is a dynamic discipline, intimately related to the proper management of earth resources and the human environment. The program prepares the student to function upon graduation as a professional geologist, or to continue his studies on the graduate level. In addition, geology majors may prepare for careers as high-school science teachers.

Knowledge of the earth has assumed critical importance because of the imminent depletion of many natural resources and the rapid deterioration of the physical environment. Shortages in fossil fuels, metals and industrial minerals have opened excellent job opportunities for graduates with a Geology degree. In addition, Federal and State environment regulations are requiring more geological information than ever before. Oil and mining companies, consulting firms, federal, state and city agencies are employing our graduates at present.

The objectives of the geology curriculum are to provide the student with a scientific understanding of earth materials, their properties, arrangement and distribution, as well as the dynamic processes that affect them; the historical dimension of the earth and its inhabitants and the evolutionary processes that shaped them; the geologist's role in the proper planning for use of earth resources and the maintenance of the quality of the environment.

Associate in Science Degree from Bronx Community College.

Bronx Community College graduates with the Associate Degree in Science will receive 60 credits toward the Bachelor of Science in Geology at York College. In addition, they will be deemed to have met all general education requirements at York College.

Total transfer credits granted toward the baccalaureate degree: 60

Minimum additional credits required at the senior college to complete baccalaureate degree: 60

C. COURSE TO COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

Sending College		Receiving College Equivalent (Or Other Evaluation)		Transfer Credit Granted
Core Requirements				
Course & Title	Credit	Course & Title	Credit	
ENG 10 Fundamentals of Composition and Rhetoric Or ENG 11 Compositions and Rhetoric I	3	<i>English Elective</i>	3	3
ENG 12 Composition and Rhetoric II	3	ENG 125 Introduction to College Writing	3	3
CMS 11 Fundamentals of Interpersonal Communication	3	SPCH 101 Oral Communication in Contemporary Society	3	3
HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World	3	HIST 100 History of the Modern World Since 1815	3	3
*Physical Education Activity Course OR HLT 91 Critical Issues in Health	1 2	Physical Education Elective HE 111 Personal Health Issues	1-2	1-2
*NOTE: Students required to complete a Modern Language should take a Physical Education Course. Information on Modern Languages is available in the BCC College Catalog				
SUBTOTAL				13-14

Required Areas of Study				
[Bronx Community College] Course & Title	Credit	[York College] Course & Title	Credit	Transfer Credit Granted
CHM 11 General Chemistry I	4	CHEM 101 Chemical Principles I	5	4
CHM 22 General Chemistry II with Qualitative Analysis	5	CHEM 102 Chemical Principles II	5	5
MTH 31 Analytical Geometry & Calculus I	4	MATH 121 Analytic Geometry and Calculus I	4	4
MTH 32 Analytical Geometry & Calculus II	5	MATH 122 Analytic Geometry and Calculus II	4	4+1 Elective
ART 11 Introduction to Art Or MUS 11 Introduction to Music OR Humanities or Social Sciences	3	Fine Arts 104 Introduction to Fine Arts Music 103 Introduction to Music History Behavioral Sciences Equivalency	3	3
Modern Language <i>Check the BCC college catalog for information regarding Modern Language requirements.</i>	0-8	<i>Foreign Language Equivalency</i>	0-8	0-8
SUBTOTAL				21-29

Specialization Requirements for Earth Systems and Environmental Science Option

[Bronx Community College] Course & Title	Credit	[York College] Course & Title	Credit	Transfer Credit Granted
CHM 27 Principles of Laboratory Safety	2	<i>CHEM Elective</i>	2	2
CHM 33 Quantitative Analysis	4	<i>CHEM Elective</i>	4	4
<i>Choose two from the following three:</i> ESE 11 Earth Systems Science: The Earth or * ESE 12 Earth Systems Science: The Atmosphere or ESE 13 The Earth Systems: The Ocean * <i>Students are advised to complete this course</i>	8	GEOL 140 Our Earth GEOL 282 Weather and Climate GEOL 120 Our Oceanic Environment	6	6+2 Elective
ESE 21 Earth Systems Science: The Environment	4	GEOL 115 Energy, Resources and the Environment	3	3+1 Elective
SUBTOTAL				18

Free Electives

Students with free electives (e.g. If not required to complete Modern Language requirements) are encouraged to select from courses detailed below. It is recommended that a sequence of courses in the same discipline be followed.

[Bronx Community College] Course & Title	Credit	[York College] Course & Title	Credit	Transfer Credit Granted
BIO 11 General Biology I	4	BIO 201 Biological Principles I	4	4
BIO 12 General Biology II	4	BIO 202 Biological Principles II	4	4
PHY 11 College Physics I	4	PHYS 101 College Physics I	6	4
PHY 12 College Physics II	4	PHYS 102 College Physics II	5	4
SUBTOTAL				0-9
TOTAL				60

D. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE

GENERAL EDUCATION		Credits
I. General Requirements (3 cr.) Writing 301 OR 302 OR 303 (3 cr.)		3
GEOLOGY B.S.		
Note: <i>Students must take one WI course within the major.</i>		
Required Foundation Courses (25.5 cr.) GEOL 211 Structural Geology (4 cr.) GEOL 217 Earth History with Paleontology (5 cr.) GEOL 225 Mineralogy (5cr.) GEOL 332 Optical Mineralogy (2 cr.) GEOL 323 Field Methods (1.5 cr.) GEOL 334 Petrology (4 cr.) GEOL 425 Field Mapping (4 cr.) Geology Electives (5 cr.) <i>Choose 5 credits from the following electives:</i> GEOL 308 Geomorphology (3 cr.) GEOL 340 Remote Sensing and Air Photo Interpretation (2 cr.) GEOL 341 Ground Water Hydrology (2 cr.) GEOL 342 Rock and Soil Mechanics (2 cr.) GEOL 343 Ore Deposits and Ore Evaluation (2 cr.) GEOL 344 Industrial Minerals and Fossil Fuels (2 cr.) GEOL 346 Laboratory Techniques in Geology (2 cr.) GEOL 349 Assessment of Environment Impact (1 cr.) GEOL 403 Paleocology (3 cr.) GEOL 411 Sedimentation (3 cr.) GEOL 412 Stratigraphy (3 cr.) GEOL 441 Geochemistry (3 cr.) GEOL 442 Geophysics (3 cr.) HPEH 140 Environmental Management (Basic) (3 cr.) HPEH 340 Pollution Control Technology (3 cr.) HPEH 420 Water Quality Analysis & Management (4 cr.) HPEH 426 Solid Waste Management (3 cr.) HPEH 429 Environmental Management (Advanced) (3 cr.)	Lecture Groups (8-10 cr.) *Choose eight to ten credits consisting of two of the following lecture groups: Group A: *BIO 201 Biological Principles I (4 cr.) *BIO 202 Biological Principles II (4 cr.) Group B: PHYS 151 University Physics I (5 cr.) PHYS 152 University Physics I (5 cr.) OR *PHYS 101 College Physics I (6 cr.) *PHYS 102 College Physics II (5 cr.) <i>*Students who complete the BCC equivalencies for the lecture group courses will not be required to complete those courses at York College.</i>	38.5-40.5
ELECTIVE COURSES		16.5-18.5
TOTAL		60

E. Articulation Agreement Follow-Up Procedures

1. Procedures for reviewing, up-dating, modifying or terminating agreement:

Bronx Community College Chemistry and Chemical Technology Department and York College Department of Earth and Physical Sciences will review implementation of the agreement every five years to ensure that students are adequately informed of the program and to identify issues requiring attention.

2. Procedures for evaluating agreement, e.g., tracking the number of students who transfer under the articulation agreement and their success:

After transfer into the York major, the performance of Bronx Community College students will be tracked using the CUNY Institutional Research Data Base. The York College Office of Institutional Advancement will inform BCC about the academic progress of transfer students.

York College Department of Earth and Physical Sciences provides advisement to all students entering the major.

3. Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:

Notice of articulation will be placed in the respective catalogues, recruiting brochures, websites, and on the CUNY TIPPS website.

Respective transfer and academic advisers will be informed and provided with copies of this agreement.

The York College Department of Earth and Physical Sciences will coordinate efforts with York's Admissions Office to make certain that materials are sent with recruitment officers for BCC's biannual Transfer and Career Day event.

F. Additional Information

Dr. George Sanchez

Vice-President of Academic Affairs

Dr. Ivelaw Lloyd Griffith

Provost and Senior Vice President for Academic
Affairs

Date and Signature

Date and Signature

Dr. Neal Phillip

Chemistry and Chemical Technology Department
Chairperson

Dr. Stanley Schleifer

Department of Earth and Physical Sciences

Date and Signature

Date and Signature