Pathways at Baruch

Since Fall 2013, all CUNY colleges have adhered to a uniform set of general education requirements known as CUNY Pathways. Although the courses that can be used to fulfill these requirements differ from college to college, the basic set of requirements is the same throughout the CUNY system. With few exceptions, any requirement that a student fulfills at one CUNY college will be considered fulfilled at any other CUNY college to which he or she transfers.

Students who entered Baruch in Fall 2013 or later must complete "Pathways" to obtain a degree. In July 2013, continuing students had the choice either to opt-in to the Pathways requirements or to complete the set of general education requirements that was in place at the college until Fall 2013 (the Baruch Common Core).

Students seeking to appeal for substitutions to or exemptions from any general education requirement must file a request with the Pathways Appeal Committee. Please click here for detailed information.

There are three parts to the Pathways requirements: I) the Required Core; II) the Flexible Core; and III) the College Option.

Part I: The Required Core (4 courses in 3 categories)

The Required Core is made up of four courses, which must be taken in three different categories: ***1) English Composition; 2) Mathematical and Quantitative Reasoning;*** and ***3) Life and Physical Sciences .*** The learning goals or outcomes of each area within the Required Core are included below, followed by lists of applicable courses.

English Composition (two courses required)

A course in this area must meet all of the following learning outcomes. A student will:

- Read and listen critically and analytically, including identifying an argument's major assumptions and assertions and evaluating its supporting evidence.
- Write clearly and coherently in varied, academic formats (such as formal essays, research papers, and reports) using standard English and appropriate technology to critique and improve one's own and others' texts.
- Demonstrate research skills using appropriate technology, including gathering, evaluating, and synthesizing primary and secondary sources.
- Support a thesis with well-reasoned arguments, and communicate persuasively across a variety of contexts, purposes, audiences, and media.
- Formulate original ideas and relate them to the ideas of others by employing the conventions of ethical attribution and citation.

ENG 2100 (or ENG 2100T) Writing I

ENG 2150 (or ENG 2150T) Writing II

Mathematical and Quantitative Reasoning * (one course required)

A course in this area must meet all of the following learning outcomes. A student will:

- Interpret and draw appropriate inferences from quantitative representations, such as formulas, graphs, or tables.
- Use algebraic, numerical, graphical, or statistical methods to draw accurate conclusions and solve mathematical problems.
- Represent quantitative problems expressed in natural language in a suitable mathematical format.
- Effectively communicate quantitative analysis or solutions to mathematical problems in written or oral form.
- Evaluate solutions to problems for reasonableness using a variety of means, including informed estimation.
- Apply mathematical methods to problems in other fields of study.

MTH 2140 Mathematics and Quantitative Reasoning**

MTH 2160 Ideas in Mathematics and Their Applications**

MTH 2003 Precalculus and Elements of Calculus

MTH 2009 Precalulus

MTH 2205 Applied Calculus

MTH 2207 Applied Calculus and Matrix Applications

MTH 2610 Calculus I

* The following courses are no longer offered at Baruch, but do appear on students' transfer evaluations. Any of these courses may be used to satisfy the Mathematical and Quantitative Reasoning requirement of the Pathways curriculum without appeal: MTH 2000; MTH 2001; MTH 2300; MTH 2300; MTH 2301; MTH 2100; MTH 2150; MTH 2006; MTH 2206; and MTH 2630. MTH 3010 Calculus II is considered a STEM Variant course, and may also be used to satisfy this requirement without appeal.

** **Zicklin and SPIA students should not take MTH 2140 or MTH 2160**, which do not meet the mathematics requirement for the BBA or BS degrees. Zicklin students must complete a course in Calculus (and must satisfy the prerequisites for whichever Calculus course they take). Therefore, these students usually take MTH 2003 or MTH 2009 and one of the Calculus courses listed above. SPIA students must complete a course in either Precalculus or Calculus.

MTH 2140 and MTH 2160 are not appropriate for students within the Weissman School of Arts and Sciences whose major requires a statistics course or additional math courses (such majors include: Actuarial Science, Biological Sciences, Economics, Financial Mathematics, Natural Sciences ad hoc, and Statistics).

Students who wish to pursue a BA in Psychology may use MTH 2140 or MTH 2160 to satisfy the Pathways requirement, but might be required to complete MTH 1023 Intermediate and College Algebra or MTH 1030 College Algebra, to satisfy the prerequisite for that major's required statistics course. For more information, please consult the Office of the Associate Dean (WSAS.AssocDean@baruch.cuny.edu; room 8-265 of the Newman Vertical Campus; telephone: 646-312-3890).

Life and Physical Sciences (one course required)

** Please see below for notes on STEM Variant courses*

A course in this area must meet all of the following learning outcomes. A student will:

- Identify and apply the fundamental concepts and methods of a life or physical science.
- Apply the scientific method to explore natural phenomena, including hypothesis development, observation, experimentation, measurement, data analysis, and data presentation.
- Use the tools of a scientific discipline to carry out collaborative laboratory investigations.
- Gather, analyze, and interpret data and present it in an effective written laboratory or fieldwork report.
- Identify and apply research ethics and unbiased assessment in gathering and reporting scientific data.

BIO 1012 Fundamentals of Biology: Human Biology Laboratory

(co-requisite with BIO 1011L in the Flexible Core)

BIO 1016 Fundamentals of Biology Laboratory: Research in Genetics, Evolution, and Ecology

(co-requisite with BIO 1015L in the Flexible Core)

CHM 1004 Fundamentals of Chemical Laboratory Techniques

(co-requisite with CHM 1003L in the Flexible Core)

ENV 1004 Fundamentals of Ecological Research

(co-requisite with ENV 1003L in the Flexible Core)

PHY 2001 Fundamentals of Experimental Physics

(co-requisite with PHY 2002L in the Flexible Core)

NOTE: The following courses are no longer offered at Baruch, but do appear on students' transfer evaluations. Any of these courses may be used to satisfy the ***Life and Physical Sciences*** or the ***Scientific World*** requirement of the Pathways curriculum without appeal: BIO 1003; BIO 1005; CHM 1000; ENV 1020; ENV 1021; and PHY 1003. One course may not be used to satisfy both requirements.

*** STEM VARIANT COURSES**

The following courses may be used to satisfy either the ***Life and Physical Sciences*** or the ***Scientific World*** requirement (one course may not satisfy both requirements). Students who wish to pursue a major or minor in the Natural Sciences should satisfy the Pathways science requirements with STEM Variant courses.

BIO 2010	Principles of Biology I
CHM 2003	General Chemistry I
PHY 2003	General Physics I
PHY 3010	Quantitative Physics I

NOTE: The Department of Natural Sciences offers "stand-alone" sections of their Pathways courses (BIO 1011L, BIO 1012, etc.), specifically designed for students who are only required to complete one half of the paired courses – lecture or lab, not both. For example, a student who transfers a ***Scientific World*** course, may satisfy the ***Life and Physical Sciences*** requirement with a stand-alone section of a Natural Sciences course in that category. These stand-alone sections are *not* open to students who enter Baruch as freshmen or to transfer students who have satisfied neither the ***Life & Physical Sciences*** nor the ***Scientific World*** requirement at the time they entered Baruch. Please consult the Department of Natural Sciences to request registration permission for any of their stand-alone sections (17 Lexington Ave, room 506; 646-660-6200).

Part II: The Flexible Core (6 courses in 5 categories)

The Flexible Core is made up of six courses, which must be taken in five different categories (numbered 4-8): ***4) World Cultures and Global Issues; 5) U.S. Experience in its Diversity; 6) Creative Expression; 7) The Individual and Society;*** and ***8) Scientific World***.

In fulfilling the six-course requirement, students may not take more than one course from any one department, discipline, or interdisciplinary field.

Please note that some departments offer courses in more than one category…

- ANT and SOC courses are offered by the Department of Sociology and Anthropology;
- ART, MSC, and THE courses are offered by the Department of Fine and Performing Arts;
- BLS and LTS *(formerly HSP)* courses are offered by the Department of Black and Latino Studies;
- BIO, ENV, CHM, and PHY courses are offered by the Department of Natural Science; and
- Within the Pathways Flexible Core, POL and PAF (formerly PUB) are considered to be a single field.

…*Therefore*, the sixth course may not be taken from ***Creative Expression***, which consists of courses from a single department. Until Spring 2016 this was also true of the ***Scientific World*** category, since the only courses it contained were offered by the Department of Natural Sciences. But in Spring 2016, PSY 1001 was added to the ***Scientific World*** category; see below.

***All Flexible Core courses must meet the following three learning outcomes*. A student will:**

- Gather, interpret, and assess information from a variety of sources and points of view.
- Evaluate evidence and arguments critically or analytically.
- Produce well-reasoned written or oral arguments using evidence to support conclusions.

The learning goals or outcomes of each area within the Flexible Core are included below, followed by lists of applicable courses.

Category 1. ***<u>World Cultures and Global Issues</u>*** *(at least one course required)*

A course in this area must meet *at least three* of the following *additional* learning outcomes. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring world cultures or global issues, including, but not limited to, anthropology, communications, cultural studies, economics, ethnic studies, foreign languages (building upon previous language acquisition), geography, history, political science, sociology, and world literature.
- Analyze culture, globalization, or global cultural diversity, and describe an event or process from more than one point of view.
- Analyze the historical development of one or more non-U.S. societies.
- Analyze the significance of one or more major movements that have shaped the world's societies.
- Analyze and discuss the role that race, ethnicity, class, gender, language, sexual orientation, belief, or other forms of social differentiation play in world cultures or societies.
- Speak, read, and write a language other than English, and use that language to respond to cultures other than one's own.

ANT 1001	Introduction to Cultural Anthropology
HIS 1001	Themes in Global History to 1500 C.E.
HIS 1003	Themes in Global History Since 1500 C.E.
LTS 1003	Latin America: An Institutional and Cultural Survey
POL 2001	United States in an Age of Globalization
POL 2260	Introduction to Comparative Government

Category 2. ***<u>U.S. Experience in its Diversity</u>*** *(at least one course required)*

A course in this area must meet *at least three* of the following *additional* learning outcomes. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the U.S. experience in its diversity, including, but not limited to, anthropology, communications, cultural studies, economics, history, political science, psychology, public affairs, sociology, and U.S. literature.
- Analyze and explain one or more major themes of U.S. history from more than one informed perspective.
- Evaluate how indigenous populations, slavery, or immigration have shaped the development of the United States.
- Explain and evaluate the role of the United States in international relations.
- Identify and differentiate among the legislative, judicial, and executive branches of government and analyze their influence on the development of U.S. democracy.
- Analyze and discuss common institutions or patterns of life in contemporary U.S. society and how they influence, or are influenced by, race, ethnicity, class, gender, sexual orientation, belief, or other forms of social differentiation.

BLS 1003	Evolution and Expressions of Racism
HIS 1000	Themes in American History
HIS 1005	Modern American History
PAF 1250	Citizenship and Public Affairs
POL 1101	American Government: Practices and Values
POL 2332	American Political Thought

Note: ***HIS 1004 History of American Civilization I*** *is no longer offered at Baruch, but it does appear on students' transfer evaluations. This course may be used to satisfy the U.S. Experience in its Diversity requirement of the Pathways curriculum without appeal.*

Category 3. ***Creative Expression*** *(one course required)*

A course in this area must meet *at least three* of the following *additional* learning outcomes. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring creative expression, including, but not limited to, arts, communications, creative writing, media arts, music, and theater.
- Analyze how arts from diverse cultures of the past serve as a foundation for those of the present, and describe the significance of works of art in the societies that created them.
- Articulate how meaning is created in the arts or communications and how experience is interpreted and conveyed.
- Demonstrate knowledge of the skills involved in the creative process.
- Use appropriate technologies to conduct research and to communicate.

ART 1000	Introduction to Design and Visual Communications
ART 1011	Art History Survey I
ART 1012	Art History Survey II
MSC 1003	Music and Civilization
MSC 1005	Principles of Music
THE 1041	Introduction to the Theatre Arts

Category 4. ***The Individual and Society*** *(at least one course required)*

A course in this area must meet *at least three* of the following *additional* learning outcomes. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the relationship between the individual and society, including, but not limited to, anthropology, communications, cultural studies, history, journalism, philosophy, political science, psychology, public affairs, religion, and sociology.
- Examine how an individual's place in society affects experiences, values, or choices.
- Articulate and assess ethical views and their underlying premises.
- Articulate ethical uses of data and other information resources to respond to problems and questions.
- Identify and engage with local, national, or global trends or ideologies, and analyze their impact on individual or collective decision-making.

PHI 1500	Major Issues in Philosophy
PHI 1600	Logic and Moral Reason
PHI 1700	Global Ethics
SOC 1005	Introduction to Sociology

Category 5. ***Scientific World**** *(at least one course required)*

Please see below for notes on STEM Variant courses

A course in this area must meet at least three of the following *additional* learning outcomes. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the scientific world, including, but not limited to: computer science, history of science, life and physical sciences, linguistics, logic, mathematics, psychology, statistics, and technology-related studies.
- Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to analyze problems and develop solutions.
- Articulate and evaluate the empirical evidence supporting a scientific or formal theory.

- Articulate and evaluate the impact of technologies and scientific discoveries on the contemporary world, such as issues of personal privacy, security, or ethical responsibilities.
- Understand the scientific principles underlying matters of policy or public concern in which science plays a role.

BIO 1011L Fundamentals of Biology: Human Biology Lecture

(co-requisite with BIO 1012 in the Required Core)

BIO 1015L Fundamentals of Biology: Genetics, Evolution, and Ecology Lecture

(co-requisite with BIO 1016 in the Required Core)

CHM 1003L Fundamentals of Chemistry

(co-requisite with CHM 1004 in the Required Core)

ENV 1003L Fundamentals of Ecology

(co-requisite with ENV 1004 in the Required Core)

PHY 2002L Fundamentals of Physics: Theory and Practice

(co-requisite with PHY 2001 in the Required Core)

PSY 1001 General Psychology *(added to the Flexible Core beginning in Spring 2016)*

NOTE: The following courses are no longer offered at Baruch, but do appear on students' transfer evaluations. Any of these courses may be used to satisfy the ***Scientific World*** or the ***Life and Physical Sciences*** requirement of the Pathways curriculum without appeal: BIO 1003; BIO 1005; CHM 1000; ENV 1020; ENV 1021; and PHY 1003. One course may not be used to satisfy both requirements.

STEM VARIANT COURSES

The following courses may be used to satisfy either the ***Life and Physical Sciences*** or the ***Scientific World*** requirement (one course may not satisfy both requirements). Students who wish to pursue a major or minor in the Natural Sciences should satisfy the Pathways science requirements with STEM Variant courses.

BIO 2010	Principles of Biology I
CHM 2003	General Chemistry I
PHY 2003	General Physics I
PHY 3010	Quantitative Physics I

***** ***CHANGES EFFECTIVE SPRING 2016***

In Spring 2016, PSY 1001 was added to the ***Scientific World*** category. The following policies went into effect at that time:

- Students who enter Baruch as freshmen and transfer students who have satisfied neither the ***Life & Physical Sciences*** nor the ***Scientific World*** requirement at the time they entered Baruch *must* take the co-requisite Natural Sciences courses to satisfy these Pathways Common Core requirements. They may take PSY 1001, but it can be used only as their sixth Flexible Core course (or as a non-Pathways elective). It *cannot* be used to satisfy the ***Scientific World*** requirement.
- Students who have already satisfied both the ***Life and Physical Sciences*** and the ***Scientific World*** requirements at the time they entered Baruch may take PSY 1001 as their sixth Flexible Core course.
- PSY 1001 may be used to satisfy the ***Scientific World*** requirement only under the following circumstances:
    1. A freshman or transfer student enters Baruch with AP, College Now, or regular transfer credit for a ***Life and Physical Sciences*** course.
    2. A freshman or transfer student enters Baruch with AP, College Now, or regular transfer credit for PSY 1001.
    3. A student completes a STEM Variant course (BIO 2010, CHM 2003, PHY 2003, or PHY 3010) at Baruch.

NOTE: The Department of Natural Sciences offers "stand-alone" sections of their Pathways courses (BIO 1011L, BIO 1012, etc.), specifically designed for students who are only required to complete one half of the paired courses – lecture or lab, not both. For example, a student who transfers a ***Life and Physical Sciences*** course, may satisfy the ***Scientific World*** requirement with either PSY 1001 or with a stand-alone section of a Natural Sciences course in that category. These stand-alone sections are *not* open to students who enter Baruch as freshmen or to transfer students who have satisfied neither the ***Life & Physical Sciences*** nor the ***Scientific World*** requirement at the time they entered Baruch. Please consult the Department of Natural Sciences to request registration permission for any of their stand-alone sections (17 Lexington Ave, room 506; 646-660-6200).

Part III: The College Option (1-4 courses)

The College Option consists of as many as four courses, depending on how much coursework the student has completed at another institution. The following table explains the College Option (COPT) requirements for students, based on their entering status.

Baruch Freshmen	12 COPT credits
Students transferring from an **Associate Degree Program to Baruch** *(including non-CUNY regionally accredited colleges)*	• Earned Associate Degree: 6 COPT credits • Earned More than 30 Credits: 9 COPT credits • Earned 30 or Fewer Credits: 12 COPT credits
Students transferring from a **CUNY Bachelor's Degree Program to Baruch**	12 COPT credits are required; HOWEVER, any COPT credits completed at and/or received upon transfer to the previous CUNY campus will transfer to Baruch with the designation. Students who have remaining COPT requirements begin taking courses at the top of the relevant Baruch COPT course list.
Students transferring from a **Non-CUNY Bachelor's Degree Program to Baruch**	12 COPT credits
Second Bachelor's Degree Students *Students with earned bachelor's degrees from institutions that are accredited and recognized by a regional accrediting U.S. agency, as well as students from international universities with degrees that are equivalent to a baccalaureate degree as determined by CUNY*	No COPT credits are required
Students who transfer multiple times *	
• Began college in associate program	6, 9, or 12 COPT credits

• Began college in baccalaureate program	12 COPT credits; HOWEVER, any COPT credits completed at and/or received upon transfer to another CUNY senior college will transfer to Baruch with the designation. Students who have remaining College Option requirements begin taking courses at the top of the relevant Baruch COPT course list.

*** The College Option requirement for a student who transfers multiple times is determined by the type of program in which he or she first enrolled. A student who begins his or her college career in an associate program, and transfers multiple times will be responsible for a total of 6, 9, or 12 College Option credits depending on the student's status when they first transferred from the associate program.**

There were four distinct College Options for students who began taking classes at Baruch before spring 2015. They were based on whether the student: 1) belonged to the Macaulay Honors College; 2) planned to receive a Bachelor of Arts (BA) degree from the Weissman School of Arts and Sciences--the specifics of this option varied according to date of entry (see below); 3) planned to receive Bachelor of Business Administration (BBA) degree from the Zicklin School of Business; or 4) planned to receive a Bachelor of Science (BS) degree from the Marxe School of Public and International Affairs--the specifics of this option varied according to date of entry (see below). As of Spring 2015, Macaulay students retain their distinct College Option, but all other Baruch undergraduates follow the "Baruch College Option."

Macaulay Honors Option at Baruch College

Course 1	IDC 1001H	The Arts in New York City
Course 2	IDC 3001H	The Peopling of New York
Course 3	IDC 3001H	Science and Technology in New York City
Course 4	IDC 4001H	New York in the Twenty-First Century

College Option for the Bachelor of Arts (BA) degree from the Weissman School of Arts and Sciences

BA students entering Baruch or opting in to Pathways in Fall 2013, follow the four courses below of this Weissman College Option:

Course 1	CMP 2800/ ENG 2800 or CMP 2850/ ENG 2850	Great Works of Literature I or Great Works of Literature II
Course 2	COM 1010	Speech Communication

Course 3		1st Foreign Language course (based on placement)*
Course 4		2nd Foreign Language course (the same language as the 1st Foreign Language course)*

*One of these courses must be completed at Baruch.

BA students entering Baruch or opting in to Pathways from Spring 2014-Fall 2014, follow the four courses below of this Weissman College Option:

Course 1	CMP 2800/ ENG 2800 or CMP 2850/ ENG 2850	Great Works of Literature I or Great Works of Literature II
Course 2		1st Foreign Language course (based on placement)*
Course 3		2nd Foreign Language course (the same language as the 1st Foreign Language course)*
Course 4	COM 1010	Speech Communication

*One of these courses must be completed at Baruch.

BA students entering Baruch or opting in to Pathways starting Spring 2015 or later, follow the four courses of the **Baruch College Option**:

Course 1	CMP 2800/ ENG 2800 or CMP 2850/ ENG 2850	Great Works of Literature I or Great Works of Literature II
Course 2		4000-level CIC "capstone" course for one of the liberal arts minors **This course must be completed at Baruch**.
Course 3		1st 3000-level liberal arts course toward the same liberal arts minor
Course 4		2nd 3000-level liberal arts course toward the same liberal arts minor

NOTES:

- *The liberal arts minor cannot be within the same area of study as the major. This is also true for students who are required to complete part of the minor for the College Option.*
- *There is no GPA stipulation attached to the College Option courses, but in order to graduate with the liberal arts minor, a student must have a grade point average of at least 2.00 in the three courses that make up his or her liberal arts minor.*

College Option for the Bachelor of Business Administration (BBA) degree from the Zicklin School of Business

BBA students entering Baruch or opting in to Pathways beginning in Fall 2013 follow the four courses of the **Baruch College Option** (from Fall 2013-Fall 2014, this option was known as the Zicklin College Option):

Course 1	CMP 2800/ ENG 2800 or CMP 2850/ ENG 2850	Great Works of Literature I or Great Works of Literature II

Course 2		4000-level CIC "capstone" course for one of the liberal arts minors **This course must be completed at Baruch**.
Course 3		1st 3000-level liberal arts course toward the same liberal arts minor
Course 4		2nd 3000-level liberal arts course toward the same liberal arts minor

There is no GPA stipulation attached to the College Option courses, but in order to graduate with the liberal arts minor, a student must have a grade point average of at least 2.00 in the three courses that make up his or her liberal arts minor.

College Option for the Bachelor of Science (BS) degree from the Marxe School of Public and International Affairs

BS students entering Baruch or opting into Pathways in fall 2013 have three ways of completing the College Option:

1. They may fulfill the BA College Option for students who entered or opted-in in Fall 2013 (see above);
2. They may fulfill the BBA College Option (see above);
3. They may fulfill the BS College Option outlined directly below:

Course 1	CMP 2800/ ENG 2800 or CMP 2850/ ENG 2850	Great Works of Literature I or Great Works of Literature II
Course 2		a 3000- or 4000-level liberal arts course selected by the student in consultation with the SPA faculty advisor
Course 3		a 3000- or 4000-level liberal arts course selected by the student in consultation with the SPA faculty advisor
Course 4		a 3000- or 4000-level liberal arts course selected by the student in consultation with the SPA faculty advisor

BS students entering Baruch or opting into Pathways from Spring 2014-Fall 2014 have two ways of completing the College Option:

1. They may fulfill the BA College Option for students who entered or opted-in during Spring 2014-Fall 2014 (see above);
2. They may fulfill the BBA College Option.

BS students entering Baruch or opting in to Pathways starting Spring 2015 or later, follow the **Baruch College Option**:

Course 1	CMP 2800/ ENG 2800 or CMP 2850/ ENG 2850	Great Works of Literature I or Great Works of Literature II
Course 2		4000-level CIC "capstone" course for one of the liberal arts minors **This course must be completed at Baruch**.
Course 3		1st 3000-level liberal arts course toward the same liberal arts minor
Course 4		2nd 3000-level liberal arts course toward the same liberal arts minor

There is no GPA stipulation attached to the College Option courses, but in order to graduate with the liberal arts minor, a student must have a grade point average of at least 2.00 in the three courses that make up his or her liberal arts minor.