

Baruch College

Academic University Report Detail

May 2021

PART A: ACADEMIC MATTERS

The following recommendations of the Curriculum Committee were approved at the Marxe School of Public and International Affairs Faculty Meeting on February 11, 2021. They will be effective for the Spring 2022 semester, pending approval of the Board of Trustees.

Section AIV: New Courses

AIV.1.1 The following new course is proposed for the Master of International Affairs programs in the Marxe School of Public and International Affairs.

Program Code: 37904

HEGIS Code: 2212.00

CUNYfirst Course ID	PAF 9431		
Department(s)	Marxe School of Public and International Affairs		
Career	<input type="checkbox"/> Undergraduate <input checked="" type="checkbox"/> Graduate		
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial		
Subject Area	Public Affairs		
Course Prefix	PAF		
Course Number	9431		
Course Title	The Policy Implications of Global Climate Change		
Catalogue Description	<p>The course will review the science underlying global climate change and then examine the impacts on the land, the oceans, the atmosphere, and on human life on the planet. Economic, political and foreign policy implications will be addressed, along with the adequacy of the international response, including the Paris Climate Agreement. Current efforts to ameliorate the rapidly increasing effects of global warming will be assessed, including infrastructure protection and resilience. The pros and cons of global, macro-engineered solutions also will be discussed. The course will conclude with a consideration of what is to be done if all such efforts prove inadequate and the 2° C. limit on global warming is exceeded.</p> <p>This course is open to all graduate students at Baruch College.</p>		
Pre-Requisites	None		
Credits	3		
Contact Hours	3		
Liberal Arts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Course Attribute (e.g. Writing Intensive, Honors, etc)	None		
Course Applicability	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	<input type="checkbox"/> Gen Ed - Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	<input type="checkbox"/> Gen Ed - College Option College Option Detail _____
Effective Term	Spring 2022		

Rationale: Rapid and unconstrained change in the Earth’s climate is perhaps the preeminent challenge of our time. The scientific consensus is now overwhelming, and the impacts of global warming are already being felt around the world in everything from rising sea levels, to melting polar ice sheets, more frequent and more severe storms and wildfires, and more widespread and longer-lasting draughts. Global climate change represents an existential threat to human life on the planet, and scientists have warned that we are fast approaching “global tipping points” which, if reached, will result in significant (negative) changes that cannot be stopped, much less reversed. It is extremely important, therefore, that graduate students develop a more sophisticated understanding of the problem of global climate change and the policies that can be deployed to address it.

This course is an elective for the Master’s in International Affairs program, to be offered annually with a projected enrollment of 20.

PART A: ACADEMIC MATTERS

The following recommendations of the Committee on Undergraduate Curriculum were approved at the Mildred and George Weissman School of Arts and Sciences Faculty Meeting on February 25, 2021 effective the Spring 2022 semester, pending approval of the Board of Trustees.

Section AIII: Changes in Degree Programs

AIII.1.1 New Liberal Arts Minor in Multilingual Translation offered by the Department of English

<p>From :</p>	<p>To: MINOR in Multilingual Translation</p>
<p>No such minor is currently offered.</p>	<p>The Multilingual Translation Minor, open to all students who have successfully completed a 4000-level language course or have proficiency in a second language, offers an introduction to the discipline of translation. Students will learn how to use the fundamentals of Translation Studies to interpret the cultural, social, and political underpinnings of literary and artistic works produced in different geographical environments, with a particular attention to how questions of gender, poetics, ideology, class, and nation operate in translations. Students will also be exposed to the basics of translation praxis and will develop the interlingual translation skills needed to produce a wide variety of texts in translation.</p> <p>To qualify for the minor, students must have successfully completed a 4000-level language course or have proficiency in a second language. To complete the minor, students must take (in any order):</p> <p>One of the following core courses: CMP/ANT 4020: Translating Between Worlds: Literature and Anthropology ENG 3880: A History of Translation</p> <p>* Students may substitute SPA 4004: Seminar in Translation: English/Span or CMP 4905: Language, Literature, and Culture of Japan, for the category I requirement with permission of the Program Director</p> <p>The Capstone Seminar ENG 4800: Literary Translation Seminar</p> <p>An elective course drawn from either of the two following categories:</p> <p><u>Linguistics:</u> ENG/COM 3700: Introduction to Linguistics and Language Learning ENG /3750: The Structure and History of English ENG/COM 4015: Globalization of English</p>

	<p>ENG 4030: Stylistics</p> <p>-OR-</p> <p><u>Cultural Translation:</u> BLS 3115: People and Culture of Haiti CMP 4900: Hispanic Writers in New York City CMP 3059: Latino/a Literature in the U.S CMP 3905: Post-Colonial French Literature of Africa and the Caribbean ENG 3036: Post-Colonial Literature ENG 3215: Literature and Globalization ENG 4120: Chaucer's Canterbury Tales ENG 5000: Independent Study in Translation (3 credits) ** FRE 4230: North Africa: Literature and Film (taught in French) FRE 4240: French Orientalism (taught in French) GLS 4900: Global Studies Capstone ** THE/ JWS 3060: Immigration on Stage and Screen LTS 3044: Migration in the Americas</p> <p>** Students may use this course if the topic is relevant to the minor. Please consult the Director of the Multilingual Translation Program for permission.</p>
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Rationale	
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This minor addresses the need for translation and translating as essential tools to understand the social, political, historical, aesthetic, and ethical implication of moving texts, artifacts, and ideas from one culture to another. This minor will expose students to a number of trends that are linked to the challenges we are facing today —globalization, the Internet, migration, cultural and political distress, gender relations— and will equip them with tools and strategies to translate across languages.

While other translation programs exist at CUNY, these programs are language-specific and do not cater to students with proficiency in multiple languages. Within the CUNY system, City College offers a few graduate courses and workshops in literary translation, but not a full degree, while Brooklyn College offers an undergraduate translation workshop in comparative literature in Spanish. Hunter College offers a Spanish-English concentration in translation that focuses on specific job categories such as healthcare, and law, as well as a major in Chinese translation, an M.A. in Translation and Interpreting, and a concentration in Russian-English translation. Baruch College currently offers a Spanish-English translation minor for undergraduates, also specific to Spanish-English translation. No current major or minor across CUNY addresses the issue of linguistic diversity and multilingualism, and most fail to capitalize on the impressive cultural and linguistic wealth of our student population.

With recent developments in media and translation-related software and applications, translation continues to expand in scope and diversity. Similarly, employment prospects for linguists, communicators, engineers, business people, and other professionals knowledgeable in translation and intercultural communication are on the rise. New York City is one of the most ethnically and linguistically diverse cities on the planet, with close to 50% of the city's population speaking a foreign language at home. Our multilingual and multidisciplinary minor is poised to provide our students with theoretical and hands-on translation tools for working and living, a task it will accomplish by taking advantage of NYC's broad network of international resources.

Effect Outside Department: None

Date of Department Approval: November 12, 2020
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Date of Weissman School of Arts and Sciences Faculty Approval: February 25, 2021
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Effective Term: Spring 2022

Section AIV. New Courses

AIV.1.1

Department(s)	English, Modern Languages and Comparative Literature		
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate		
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial		
Subject Area	English and Comparative Literature		
Course Prefix	ENG and CMP		
Course Number	3880		
Course Title	A History of Translation		
Catalogue Description	In the modern world, issues of translation and intercultural communication arise everywhere: in literary texts, on the Internet, on the screen, in business, in science, and in many other domains. This course is designed to explore the history, nature, and practice of the discipline of translation, with a particular emphasis on the historical development of ideas about translation and translation practices from antiquity until today. (Students will receive credit for ENG 3880 or CMP 3880, not both. These courses may substitute for each other with the F-replacement policy.)		
Prerequisites	ENG/CMP/LTT 2800 or 2850 and either a 4000-level foreign language course or proficiency in a second language* * Proficiency in a second language to be determined after consultation with the Director of the Multilingual Translation Program		
Credits	3		
Contact Hours	3		
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Course Attribute (e.g. Writing Intensive, Honors, etc.)			
Course Applicability	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	<input type="checkbox"/> Gen Ed - Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	<input type="checkbox"/> Gen Ed - College Option College Option Detail _____
Effective Term	Spring 2022		

Rationale: A History of Translation will help students gain basic knowledge of how a wide array of translation practices have influenced the genealogy of many canonical texts and works of art. The course tackles some of the key issues that have informed ideas about translation theory and practice over the past two thousand years, and disrupts the traditional distinctions between original/translation, author/translator, and word/sense, as well as the assumptions such distinctions imply about fidelity, accuracy and equivalence.

English is considered the home department for this course; it will be offered once per year with a projected enrollment of 25 students. ENG/CMP 3880 may be used as an elective within the English major (NYSED program codes 01956 and 60009) or English minor; as a Core course within the proposed Multilingual Translation minor; as an elective within the Comparative Literature minor; or as a general elective for the BA, BBA, and BS degrees for new and continuing students.

AIV.1.2

Department(s)	English, Modern Languages and Comparative Literature		
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate		
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial		
Subject Area	English and Comparative Literature		
Course Prefix	ENG and CMP		
Course Number	4800		
Course Title	Literary Translation Seminar		
Catalogue Description	The capstone Literary Translation Seminar will offer students basic knowledge and hands-on experience both in the field of Translation Studies and in the practice of literary translation. Translation today is an all-encompassing concept that describes the movement of texts, images, artifacts and ideas across linguistic, semiotic and cultural divides. As such, it is an indispensable theoretical framework for the analysis of our multilingual world. Drawing on expertise from several disciplines, the course will consider the multifaceted concept of translation from a diachronic and synchronic perspective, and will focus extensively on how translation and a host of other associated concepts – paraphrase, imitation, mimesis, transmesis, transliteration, transcreation, recreation, transformation, parody, appropriation, rewriting, adaptation, transference, transcoding, transduction, interpretation – have impacted, and still impact, all human activity. (Students will receive credit for ENG 4800 or CMP 4800, not both. These courses may substitute for each other with the F-replacement policy.)		
Prerequisites	ENG/CMP/LTT 2800 or 2850 and either a 4000-level foreign language course or proficiency in a second language* * Proficiency in a second language to be determined after consultation with the Director of the Multilingual Translation Program		
Credits	3		
Contact Hours	3		
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Course Attribute (e.g. Writing Intensive, Honors, etc.)			
Course Applicability	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	<input type="checkbox"/> Gen Ed - Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	<input type="checkbox"/> Gen Ed - College Option College Option Detail _____
Effective Term	Spring 2022		

Rationale: Bilingual students of varied linguistic backgrounds will learn how to use translation theory as a tool to approach literature, art and the world, as well as to understand how the practice of translation is inherently creative, productive, and dynamic. Exposure to the theory and practice of translation will hone students' critical skills and help them to analyze cultural difference, otherness, and diversity. It will also assist them in interpreting and interrogating the artistic, social, anthropological, and political underpinnings of works of art that are produced (or reproduced) in different geographical environments.

English is considered the home department for this course; it will be offered once per year with a projected enrollment of 25 students. ENG/CMP 4800 may be used as an elective within the English major (NYSED program codes 01956 and 60009); as an elective or capstone course within the English minor; as the capstone course for the proposed Multilingual Translation minor; as an elective or capstone course within the Comparative Literature minor; or as a general elective for the BA, BBA, and BS degrees for new and continuing students.

AIV.1.3

Department(s)	Sociology/Anthropology		
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate		
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial		
Subject Area	Anthropology		
Course Prefix	ANT		
Course Number	3710		
Course Title	Anthropology of Violence and Memory		
Catalogue Description	<p>This course examines the role of culture in understanding the relationship between memory and history, especially focusing on the politics of memorial practices in the aftermath of violence. Violence fundamentally destroys the social fabric and challenges the possibility of representation. Yet, memory in its various cultural manifestations, including testimony, narrative, monuments, and memorials, often becomes central to the way individuals and communities try to rebuild. We start by exploring the relationship between memory and history, looking specifically at questions of oral history and historical memory, as well as understandings of collective memory and historical consciousness conceived by anthropologists, sociologists, and historians. We then move on to the particular cultural forms and sites through which history and memory emerge, including testimony, truth commissions, monuments, and studies of struggles over commemoration and the politics of memory, truth, and witnessing in the wake of political violence and genocide. We explore these questions through an ethnographic examination of several cases, including the Holocaust, state violence in Latin America, the Rwandan genocide, and the South African Truth and Reconciliation Commission. This course will be taught using a combination of lectures, readings, films, art, and podcasts. This is a challenging, upper-level undergraduate course. Engaged and timely participation, especially regarding reading and writing assignments, as well as intellectual generosity are required.</p>		
Prerequisites	ANT 1001 or SOC 1005		
Credits	3		
Contact Hours	3		
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Course Attribute (e.g. Writing Intensive, Honors, etc.)			
Course Applicability	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	<input type="checkbox"/> Gen Ed - Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	<input type="checkbox"/> Gen Ed - College Option College Option Detail _____
Effective Term	Spring 2022		

Rationale: Memory is a fundamental part of who we are as individuals, groups and societies. It is also a useful conceptual portal through which we can explore key social scientific ideas regarding identity and culture. The emphasis in this course on looking at memory and violence stems from an understanding that many of the ongoing social and political conflicts in the world are rooted in unresolved violent pasts and memories.

ANT 3710 will be offered once per year with a projected enrollment of 35 students. It may be used as an elective within both the Anthropology and Sociology minors, as an elective within the Sociology major (NYSED program codes 01974 and 60026), and as a general elective for the BA, BBA, and BS degrees for new and continuing students.

Section AV. Changes in Existing Courses

AV.1.1 Change in Course Title and Description to be offered by the History Department

CUNYfirst Course ID	091982		
FROM		TO	
Department	History	Department	n/c
Course	HIS 3041 Colonial America: Settlement to Independence	Course	HIS 3041 Colonial America
Prerequisite	One, 1000-level history course or instructor permission	Prerequisite	n/c
Hours	3	Hours	n/c
Credits	3	Credits	n/c
Description	<p>This course will analyze the transformation of the English mainland colonies from frontier settlements to complex societies. It will focus on patterns of immigration, demographic variations, the development of regional economies and labor systems, the emergence of slavery, the maturation of political systems, gender roles, and racial and class tensions within this society. It will also examine the changing British policy decisions and the ideological and political response of the colonists that led to the American Revolution.</p>	Description	<p>This course will analyze the colonial past of the United States. It will focus on <u>indigenous societies, European settlement, the emergence of an Atlantic economy, slavery, gender roles, relationships between British colonies and competing colonial systems, and racial and class tensions within this society.</u> <u>It examines the origins and consequences of the American Revolution as well as the establishment of a new republic.</u></p>
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Spring 2022

Rationale: The History department felt it appropriate to update the course title, description, and learning goals of this course to bring it up to date with current trends in the field of colonial American history. The changes deemphasize British settlement as the “start” of colonial history, focus more on indigenous societies, and invite students to view colonial America through a more global and comparative lens.

AV.1.2 Change in Course Prerequisites and Description to be offered by the Natural Sciences Department

CUNYfirst Course ID	090305 (BIO 2020); 090306 (BIO 2020H)		
FROM		TO	
Department	Natural Sciences	Department	n/c
Course	BIO 2010 Principles of Biology I	Course	n/c
Prerequisite	High school biology or departmental permission. Not open to students who have completed BIO 1010 or BIO 1005. Department Consent required	Prerequisite	<u>Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor or Environmental Sustainability Minor.</u> Not open to students who have completed BIO 1010, BIO 1005, <u>or BIO 1011L/1012.</u>
Co-requisites	BIO 2010L	Co-requisites	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4.5	Credits	n/c
Description	This course introduces the student to biological science. Topics include the chemistry of life, cellular organization in prokaryotes and eukaryotes, metabolism, and animal anatomy and physiology: nutrition, circulation and gas exchange, immunity, nervous control, neuroendocrine integration, homeostasis, excretion and osmoregulation, and reproduction and development. Laboratory exercises include observation, dissection, and experimentation. Written laboratory reports are required. This course is especially recommended for students who are considering future study in biology and may wish to take BIO 3001 (formerly BIO 2020), Principles of Biology II. (Not open to students who have completed BIO 1005).	Description	This course introduces the student to biological science. Topics include the chemistry of life, cellular organization in prokaryotes and eukaryotes, metabolism, and animal anatomy and physiology: nutrition, circulation and gas exchange, immunity, nervous control, neuroendocrine integration, homeostasis, excretion and osmoregulation, and reproduction and development. Laboratory exercises include observation, dissection, and experimentation. Written laboratory reports are required. This course is especially recommended for students who are considering future study in biology and may wish to take BIO 3001 (formerly BIO 2020), Principles of Biology II. (Not open to students who have completed BIO 1005 <u>or BIO 1011L/1012</u>).
Requirement Designation		Requirement Designation	
Liberal Arts	[x] Yes [] No	Liberal Arts	[x] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	

General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input checked="" type="checkbox"/> Scientific World	General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input checked="" type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.3 Change in Course Prerequisites and Description to be offered by the Natural Sciences Department

CUNYfirst Course ID	090319		
FROM		TO	
Department	Natural Sciences	Department	n/c
Course	BIO 3001 Principles of Biology II	Course	n/c
Prerequisite	BIO 2010 or departmental permission. Not open to students who have completed BIO 1003 or BIO 1015L/1016. Department Consent required	Prerequisite	<u>BIO 2010 and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor or Environmental Sustainability Minor.</u> Not open to students who have completed BIO 1003 or BIO 1015L/1016.
Co-requisites	BIO 3001L	Co-requisites	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4.5	Credits	n/c
Description	Formerly BIO 2020. This course is a continuation of BIO 2010. Topics include mendelian genetics, molecular genetics, regulation of gene expression; the evolution by natural selection, speciation and branching evolution, diversity of organisms and their classification; plant physiology, reproduction, and classification; the ecology of populations, communities, and ecosystems. Laboratory exercises include both observation, dissection,	Description	Formerly BIO 2020. This course is a continuation of BIO 2010. Topics include mendelian genetics, molecular genetics, regulation of gene expression; the evolution by natural selection, speciation and branching evolution, diversity of organisms and their classification; plant physiology, reproduction, and classification; the ecology of populations, communities, and ecosystems. Laboratory exercises include both observation, dissection, and experimentation and independent group

	and experimentation and independent group research. Written laboratory reports and an oral presentation are required. Recitation includes oral reports on assigned readings. Not open to students who have completed BIO 1003.		research. Written laboratory reports and an oral presentation are required. Recitation includes oral reports on assigned readings. Not open to students who have completed BIO 1003 <u>or</u> <u>BIO 1015L/1016.</u>
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.4 Change in Course Prerequisites and Descriptions to be offered by the Natural Sciences Department

CUNYfirst Course ID	134019 (BIO 2100); 134020 (ENV 2100)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO/ENV 2100 Biostatistics	Course	n/c
Prerequisite	MTH 1030 Not open to students who have completed STA 2000 or STA 2100.	Prerequisite	One of the following courses: <u>MTH 1023; FSPM 1023; MTH 1030; FSPM 1031; MTH 2000; MTH 2001; MTH 2003; MTH 2009; MTH 2205; MTH 2206; MTH 2207; MTH 2610; or any MTH course at the 3000-level or above. Neither MTH 2140 nor 2160 serves as a prerequisite for this course.</u> Not open to students who have completed <u>PSY 2100, STA 2000, or STA 2100.</u>
Hours	4	Hours	n/c
Credits	3	Credits	n/c

Description	This course provides an introduction to basic statistics commonly used in life science research. Topics will include experimental design, one-sample tests, the use of the linear model (including t-tests, ANOVA, ANCOVA, and regression), and an introduction to semi- and fully-non-parametric tests. Students will gain proficiency in using the R programming environment. (Students will receive credit for BIO 2100 or ENV 2100, not both. These courses may substitute for each other in the F-replacement policy. BIO/ENV 2100 is not open to students who have completed STA 2000 or STA 2100).	Description	This course provides an introduction to basic statistics commonly used in life science research. Topics will include experimental design, one-sample tests, the use of the linear model (including t-tests, ANOVA, ANCOVA, and regression), and an introduction to semi- and fully-non-parametric tests. Students will gain proficiency in using the R programming environment. (Students will receive credit for BIO 2100 or ENV 2100, not both. These courses may substitute for each other in the F-replacement policy. BIO/ENV 2100 is not open to students who have completed <u>PSY 2100</u> , STA 2000, or STA 2100).
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.5 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090322		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO 3005 Molecular and Cellular Biology	Course	n/c
Prerequisite	CHM 2003 and one semester of a college-level biology course with laboratory.	Prerequisite	CHM 2003 and one semester of a college-level biology course with laboratory (BIO 1012, BIO 1016,

	Department Consent required		BIO 2010, or BIO 3001) and [Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor.]
Co-requisite	CHM 3001	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	The biology of cells is examined with an emphasis on the relationship between organelle structure and function. Activity of the nucleus, cell structure, division and growth, and tools for studying genes will be discussed. Laboratory experiments are performed with isolated organelles or intact cells. Techniques include cell fractionation, bio-chemical assays, and DNA isolation and modification. Students will also read and analyze articles from scientific journals.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.6 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090323 (BIO 3009); 116386 (BIO 3009H); 091498 (ENV 3009)		
FROM		TO	

Department	Natural Sciences	Departments	n/c
Course	BIO/ENV 3009 Conservation Biology and Sustainable Development	Course	n/c
Prerequisite	A one-semester college natural science course with laboratory.	Prerequisite	A one-semester college natural science course with laboratory (<u>BIO 1012, BIO 1016, BIO 2010, BIO 3001, CHM 1004, CHM 2003, ENV 1004, ENV 3001, PHY 2001, or PHY 2003</u>).
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4.5	Credits	n/c
Description	This course focuses on the theory and practice of conserving biological diversity. Lecture, lab, and field activities involve defining and measuring biodiversity, understanding the importance of biodiversity and the anthropogenic mechanisms that result in species extinction, and exploring biological strategies for the conservation of biodiversity from genes to entire ecosystems. Students also examine how conservation biology is related to broader efforts for sustainable development, including asking under what conditions sustainability is a useful scientific concept. This course is cross-listed as ENV 3009. Student will receive credit for BIO 3009 or ENV 3009, not both. These courses may not substitute for each other in the F grade replacement policy.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.7 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090324 (BIO 3010); 090325 (BIO 3010H)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO 3010 Comparative Vertebrate Anatomy	Course	n/c
Prerequisite	BIO 3001 (2020) or departmental permission. Department Consent required	Prerequisite	BIO 3001 (2020) and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor.
Co-requisite	BIO 3010L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	The structure and function of vertebrate organ system are discussed with reference to evolutionary and development history. Laboratories include macroscopic study of these systems through dissection of shark and cat and microscope examination of selected histological preparation of tissues. An individual report combines laboratory observation with literature and internet research.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	[x] Yes [] No	Liberal Arts	[x] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.8 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090328		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO 3012 Endocrinology	Course	n/c
Prerequisite	CHM 2003 (2100) and either BIO 1005 or BIO 2010 and departmental permission.	Prerequisite	CHM 2003 (2100) and either BIO 1005 or BIO 2010, <u>and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor.</u>
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	Consideration is given to the biosynthesis, secretion, regulation, and actions of the major bioactive chemical messengers, hormones, and neurotransmitters. Both classical and modern approaches to the study of endocrine tissues and substances are discussed, including replacement therapy, bioassay, immunohistochemistry, plasma membrane receptors, and radioimmunoassay. Laboratory exercises include studies of the microscopic anatomy of endocrine organs and their target tissues, determination of hormone concentrations using radioimmunoassay, and analysis of data from published scientific research reports of topics in endocrinology.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity

	<input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World		<input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.9 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090330		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO 3015 Principles of Genetics	Course	n/c
Prerequisite	BIO 3001 (2020) or departmental permission. Department Consent required	Prerequisite	BIO 3001 (2020) and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor.
Co-requisite	BIO 3015L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course provides a brief review genetics and emphasizes current topics of molecular, population and quantitative genetics. The laboratory exercises employ a variety of model organism, such as corn, flies, bacteria and mold. Classic experiments as well as modern molecular techniques including DNA isolation, PCR amplification and bacterial transformation will be performed.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity

	<input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World		<input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.10 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	134177 (BIO 3016); 134178 (ENV 3016)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO/ENV 3016 Environmental Modelling	Course	n/c
Prerequisite	MTH 1030 and one semester of a college-level biology or environmental studies course with laboratory; BIO/ENV 2100, STA 2000, or STA 2100 is strongly recommended.	Prerequisite	<u>MTH 1023, MTH 1030, FSPM 1023, or FSPM 1031</u> and one semester of a college-level biology or environmental studies course with laboratory (<u>BIO 1012, BIO 1016, BIO 2010, BIO 3001, ENV 1004, or ENV 3001</u>); BIO/ENV 2100, STA 2000, STA 2100, or <u>PSY 2100</u> is strongly recommended.
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course provides an introduction to how simulations and models are used in environmental studies. Topics will include the use of deterministic and stochastic models applied at individual, community, and ecosystem levels. Students will gain proficiency in using the R programming environment. Students will receive credit for BIO 3016 or ENV 3016, not both. These courses may substitute for each other in the F-replacement policy.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World

Effective		Effective	Summer 2021
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Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.11 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	116320 (BIO 3020); 120723 (ENV 3020)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO/ENV 3020 Biology of Invertebrates	Course	n/c
Prerequisite	one semester of college laboratory science in Environmental Studies or Biology and departmental permission.	Prerequisite	<u>A one-semester college natural science course with laboratory (BIO 1012, BIO 1016, BIO 2010, BIO 3001, CHM 1004, CHM 2003, ENV 1004, ENV 3001, PHY 2001, or PHY 2003).</u>
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	Formerly BIO 2012. This course describes the identifying characteristics of major phyla, classes, and orders of invertebrate animals. Laboratory periods are used to study the morphological, physiological, behavioral, and ecological characteristics of selected invertebrates. Examples of the ecological and economic importance of specific organisms are explained throughout the course. (Students will receive credit for BIO 3020 or ENV 3020, not both. These courses may substitute for each other in the F-replacement policy.)	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity

	<input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World		<input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.12 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090334 (BIO 3030); 091501 (ENV 3030)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO/ENV 3030 Principles of Evolution: Processes, Patterns, and the History of Life	Course	n/c
Prerequisite	A one-semester college natural science course with laboratory, preferably in environmental studies or biology, and departmental permission.	Prerequisite	<u>One-semester of a college-level biology or environmental studies course with laboratory (BIO 1012, BIO 1016, BIO 2010, BIO 3001, ENV 1004, ENV 3001, or ENV 3009) or departmental permission.</u>
Hours	2 Lecture Hours; 2 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course focuses on the principles of biological evolution. Topics include the impact and application of Darwin's theory of natural selection, and contemporary concepts of adaptation, molecular evolution, formation of new species, the fossil record, biogeography, and principles of classification. Laboratory and field work may include trips to museums, zoos and field observations. Students will present oral reports on current discoveries and controversies related to evolutionary biology. (Students will receive credit for either BIO 3030 or ENV 3030. These courses may substitute for each other in the F grade replacement policy.)	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required

	<input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World		<input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.13 Change in Course Prerequisites to be offered by the Natural Sciences and the Psychology Departments

CUNYfirst Course ID	149840 (BIO 3032); 149535 (ENV 3032); 149533 (PSY 3032)		
FROM		TO	
Departments	Natural Sciences and Psychology	Departments	n/c
Course	BIO/ENV/PSY 3032 Animal Behavior	Course	n/c
Prerequisite	one course in biology or environmental studies with laboratory or department permission	Prerequisite	<u>A one-semester college natural science course with laboratory (BIO 1012, BIO 1016, BIO 2010, BIO 3001, CHM 1004, CHM 2003, ENV 1004, ENV 3001, PHY 2001, or PHY 2003).</u>
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	Behavior is a key interface between an animal's genome and the environment. In this course, students will learn about the historical foundations of the field, current theories about, and evidence for a broad range of behavioral topics. In the laboratory component, students will get hands-on experience conducting animal behavior research through experiments and observations at all levels of analysis. Students may receive credit for only one of the following courses: BIO 3032; ENV 3032; or PSY 3032. These courses may substitute for each other with the F-replacement option.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.14 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	109063 (BIO 3050); 109062 (ENV 3050)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO/ENV 3050 Freshwater Ecology	Course	n/c
Prerequisite	CHM 2003, BIO 3001, and departmental permission	Prerequisite	CHM 2003 and BIO 3001
Co-requisite	BIO/ENV 3050L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course explores the structure and function of freshwater ecosystems with an emphasis on the interaction between the physiochemical environment and the behavioral and physiological adaptations of the organisms that inhabit them. All topics will include discussion of past and future human pressures on freshwater environments globally. Students will receive credit for either BIO 3050 or ENV 3050, not both.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	[x] Yes [] No	Liberal Arts	[x] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	

General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.15 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090338		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO 4010 Human Physiology	Course	n/c
Prerequisite	CHM 2003 (2100) and BIO 3010 (2013) and departmental permission.	Prerequisite	CHM 2003 (2100) and BIO 3010 (2013) and <u>Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor.</u>
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	The interrelationship of organ systems in maintaining homeostasis in man is examined. Laboratory includes studies of human cardiopulmonary function, hematology, and excitable tissues, i.e., nerves and muscles. Students are required to write a review articles base on primary resources from current research literature. For students with two other upper-level (3000 or above) courses in natural sciences, this course may serve as the capstone for the Tier III minor in natural sciences.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.16 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090341		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	BIO 4015 Developmental Biology	Course	n/c
Prerequisite	BIO 3015 (2016) and departmental permission.	Prerequisite	<u>BIO 3015 (2016) and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Natural Sciences Minor.</u>
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course includes a descriptive and experimental analysis of the developmental processes involved in gametogenesis, fertilization, cleavage, and gastrulation of representative vertebrate and invertebrate embryos and the inductive, genetic, and morphogenetic factors controlling these processes. The laboratory exercises involve a practical study of embryonic development using prepared slides and live chick, frog, and sea urchin embryos. Written laboratory reports and an oral presentation based on a library research project will be required. For students with two other upper-level (3000 or above) courses in	Description	n/c

	natural sciences. This course may serve as the capstone for the Tier III minor in natural sciences.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.17 Change in Course Prerequisites and Description to be offered by the Natural Sciences Department

CUNYfirst Course ID	090552 (CHM 2003); 090553 (CHM 2003H)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	CHM 2003 General Chemistry I	Course	n/c
Prerequisite	Department permission Not open to students who have completed CHM 1000, CHM 1003L, CHM 1004, or CHM 1005.	Prerequisite	<u>Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Chemistry Minor or Natural Sciences Minor or Environmental Sustainability Minor.</u> Not open to students who have completed CHM 1000, CHM 1003L, CHM 1004, or CHM 1005.
Co-requisite	CHM 2003L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course is a survey of the basic principles and laboratory techniques of chemistry. Topics covered include stoichiometry, electronic	Description	This course is a survey of the basic principles and laboratory techniques of chemistry. Topics covered include stoichiometry, electronic structure of atoms,

	structure of atoms, chemical bonding, molecular structure, states of matter, and solutions. Recommended for science majors and students with strong chemistry backgrounds. Not open to students who have taken CHM 2100.		chemical bonding, molecular structure, states of matter, and solutions. Recommended for science majors and students with strong chemistry backgrounds. Not open to students who have completed <u>CHM 1000, CHM 1003L, CHM 1004, CHM 1005, or CHM 2100.</u>
Requirement Designation		Requirement Designation	
Liberal Arts	<input type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input checked="" type="checkbox"/> Scientific World	General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input checked="" type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.18 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090557		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	CHM 3001 General Chemistry II	Course	n/c
Prerequisite	CHM 2003 (2100) or departmental permission. Department Consent required	Prerequisite	CHM 2003 (2100) and <u>Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Chemistry Minor or Natural Sciences Minor.</u>
Co-requisite	CHM 3001L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course is a study of chemical kinetics, chemical equilibrium, thermodynamics, acids and	Description	n/c

	bases, ionic equilibria, oxidation and reduction reactions, electrochemistry, and coordination compounds. Not open to students who have completed CHM 3100.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.19 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090559		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	CHM 3003 Principles of Organic Chemistry I	Course	n/c
Prerequisite	CHM 3001 (2004, 3100) or departmental permission.	Prerequisite	CHM 3001 (2004, 3100) <u>and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Chemistry Minor or Natural Sciences Minor.</u>
Co-requisite	CHM 3003L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course deals with the properties, reactions, and synthesis of the major classes of organic compounds and functional groups, with special reference to hydrocarbons, aliphatic alcohols, ethers, carbonyls, carboxylic acids, and their derivatives; principles and applications of resonance and orbital theories, stereoisomerism, and reaction mechanisms; spectral properties of organic compounds and their functional groups.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.20 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090561		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	CHM 3006 Principles of Organic Chemistry II	Course	n/c
Prerequisite	CHM 3003 (4300) or equivalent.	Prerequisite	CHM 3003 (4300) <u>and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Chemistry Minor or Natural Sciences Minor.</u>
Co-requisite	CHM 3006L	Co-requisite	n/c
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course is a continuation of CHM 3003. The laboratory exercises include distillation, crystallization, extraction, synthesis, gas-liquid chromatography, and qualitative organic analysis.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.21 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	090061		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	CHM 4010 Medicinal Chemistry	Course	n/c
Prerequisite	CHM 3003 Departmental Permission is required.	Prerequisite	<u>CHM 3003 and Biological Sciences Plan or (Liberal Arts Ad Hoc Plan with Biology Sub-Plan) or Chemistry Minor or Natural Sciences Minor.</u>
Co-requisite	CHM 4010L	Co-requisite	n/c
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course is offered to students interested in pursuing a career in the area of medicine, dentistry, or pharmaceutical chemistry. Topics include concepts in drug discovery, classifications of drugs, identification of pharmacophores (the active portions of molecules), mechanisms of drug action, metabolism and toxicity of drugs, drug delivery and prodrugs, and drug synthesis. In addition, students are introduced to computer-aided drug design. The laboratory highlights experimental techniques commonly used in drug discovery. The course includes a visit from a medicinal or pharmaceutical chemist from academia or industry. For students with two other upper-level (3000 or above) courses in natural sciences, this course may serve as the capstone for the Tier III minor in natural sciences.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	

General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.22 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	091489		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	ENV 3001 Introduction to Environmental Science	Course	n/c
Prerequisite	A one-semester college natural science course with laboratory.	Prerequisite	A one-semester college natural science course with laboratory (<u>BIO 1012, BIO 1016, BIO 2010, BIO 3001, CHM 1004, CHM 2003, ENV 1004, ENV 3001, PHY 2001, or PHY 2003</u>).
Hours	2 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course is a descriptive introduction to those aspects of natural science that relate to current problems of environmental deterioration. It examines how scientific principles and methods may be used to conserve and extend mineral resources, to recycle materials in short supply, and to safely dispose of waste products.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	[x] Yes [] No	Liberal Arts	[x] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	

General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.23 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	091490		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	ENV 3002 Energy Conservation	Course	n/c
Prerequisite	A one-semester college natural science course with laboratory. Department Consent required	Prerequisite	A one-semester college natural science course with laboratory (<u>BIO 1012, BIO 1016, BIO 2010, BIO 3001, CHM 1004, CHM 2003, ENV 1004, ENV 3001, PHY 2001, or PHY 2003</u>).
Hours	3 Lecture Hours; 2 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	A survey is made of the many different sources of energy and the many ways in which it is produced. Some of the main features of the Earth are described. A connection is made between energy production and its possible effect on some of these Earth features. Energy policy and cost are also brought into the total picture.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	[x] Yes [] No	Liberal Arts	[x] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	

General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.24 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	091497		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	ENV 3008 Air and Water Pollution	Course	n/c
Prerequisite	A one-semester college natural science course with laboratory.	Prerequisite	A one-semester college natural science course with laboratory (<u>BIO 1012, BIO 1016, BIO 2010, BIO 3001, CHM 1004, CHM 2003, ENV 1004, ENV 3001, PHY 2001, or PHY 2003</u>).
Hours	2 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	The subject matter of this course is sources, types, and effects of air and water pollutants. Students study air- and water-quality analyses and pollution control techniques. Laboratory exercises include measurement of particulates in air and chemical analysis of airborne and water pollutants.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.25 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	109604		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	ENV 4005 Ecosystem Sustainability	Course	n/c
Prerequisite	Two laboratory science courses at the 3000-level or above in Environmental Studies and/or Biology and departmental permission.	Prerequisite	Two laboratory science courses at the 3000-level or above in Environmental Studies and/or Biology. Including: ENV 3001, BIO 3001, BIO/ENV 3009, BIO/ENV 3030, BIO/ENV 3020, ENV 3002, ENV 3008, ENV 3015, BIO/ENV 3016, and BIO/ENV 3050
Co-requisite	ENV 4005L	Co-requisite	n/c
Hours	3 lecture hours; 2 lab hours	Hours	n/c
Credits	4	Credits	n/c
Description	The long-term sustainability of ecosystems is a common goal for natural resource agencies. This goal can be achieved only through successful ecosystem management. In this course students study the theoretical background and current status of the science-based knowledge of ecosystem management through an exploration of the use/misuse of ecosystems and the natural resources they provide. For students with two other upper-level (3000 or above) courses in the discipline, this course may serve as the capstone for the Tier III minor in natural sciences. This course may also serve as the capstone for the interdisciplinary Tier III minor in environmental sustainability.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression

	___ Individual and Society ___ Scientific World		___ Individual and Society ___ Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.26 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	091502		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	ENV 4020 Microbial Ecology	Course	n/c
Prerequisite	one 3000 level course in biology or environmental studies and written department permission. For the students with two other upper level (3000 or above) in the discipline, this course may serve as the capstone for the Tier III requirement.	Prerequisite	One 3000 level course in biology or environmental studies (<u>ENV 3001, BIO 3001, BIO/ENV 3009, BIO/ENV 3030, BIO/ENV 3020, ENV 3002, ENV 3008, ENV 3015, BIO/ENV 3016, BIO/ENV 3050, BIO 3005, BIO 3010, BIO 3012, or BIO 3015</u>)
Hours	2 Lecture Hours; 4 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course is a study of the interrelationships of microorganisms with other organisms and the abiotic environment. Lecture topics include the metabolic diversity of microorganisms, the role of microorganisms in biogeochemical cycles, and industrial use of microorganisms. Laboratory exercises include a study of microorganisms found in soil, water, and food; analysis of food and water quality; and microbial indices of pollution of food and water. This course will be offered if there is sufficient demand. For students with two other upper-level (3000 or above) courses in the discipline, this course may serve as the capstone for the Tier III minor in natural sciences. This course will be offered if there is sufficient demand.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.27 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID		TO	
FROM	091504	TO	
Department	Natural Sciences	Departments	n/c
Course	ENV 4900 Topics in Environmental Science	Course	n/c
Prerequisite	Two upper level (3000 or above) courses in natural sciences or departmental permission.	Prerequisite	Two <u>laboratory science courses at the 3000-level or above in Environmental Studies and/or Biology</u> or departmental permission. Including: <u>ENV 3001, BIO 3001, BIO/ENV 3009, BIO/ENV 3030, BIO/ENV 3020, ENV 3002, ENV 3008, ENV 3015, BIO/ENV 3016, BIO/ENV 3050, BIO 3005, BIO 3010, BIO 3012, BIO 3015, BIO 4004, BIO 4010, BIO 4015, and ENV 4005.</u>
Hours	2 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course examines timely and complex environmental issues, for example: energy resources, urban environment, freshwater resources, climate change, global biodiversity, world food supply, environmental crime. Students find, evaluate, and document sources of information concerning the topic, discuss alternative viewpoints with other students in class, and write term papers based upon their research. Students also design and conduct laboratory and field studies on some aspect of the topic, present their results orally to the class, and prepare a poster summarizing their findings. Topics vary from semester to semester. Students may enroll in ENV 4900 more than once if the topic is different.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science

	<input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World		<input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.28 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	093716		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 2003 General Physics I	Course	n/c
Prerequisite	MTH 2003 or equivalent and departmental permission . Not open to students who have completed PHY 2001, 2002L, 3004, or 3010. Department Consent required	Prerequisite	MTH 2003 or MTH 2009 or equivalent. Not open to students who have completed PHY 2001, 2002L, 3004, or 3010.
Co-requisite	PHY 2003L	Co-requisite	n/c
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	<p>This course is a quantitative study of the principles and techniques of physics. It is the first half of a one-year survey of physics. The following topics are studied: equilibrium of a rigid body, planar motion of bodies, Newton's laws, work and energy, conservation principles, elasticity and periodic motion, fluid statics and dynamics, temperature, heat thermodynamics, and mechanical waves. This course is designed for students with an interest in the natural sciences, computers, mathematics, or statistics.</p> <p>Not open to students who have completed PHY 2001 and PHY 2002L, PHY 3004, or PHY 3010.</p>	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input checked="" type="checkbox"/> Scientific World	General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input checked="" type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.29 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	091721		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 3001 General Physics II	Course	n/c
Prerequisite	PHY 2003 or (PHY 2002L and PHY 2001) Not open to students who have completed PHY 3006 or PHY 3020.	Prerequisite	PHY 2003 or (PHY 2002L and PHY 2001) <u>or</u> PHY 3004 or PHY 3010. Not open to students who have completed PHY 3006 or PHY 3020.
Co-requisite	PHY 3001L	Co-requisite	n/c
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	<p>This course is a continuation of PHY 2003 and of Pathways PHY 2002L and PHY 2001. The following topics are studied: special relativity, electricity and magnetism, geometric and physical optics, discovery of electron, photoelectric effect, atomic physics, quantum effects, nuclear physics, fundamental particles, and applications to biological systems and medical instrumentation.</p> <p>Not open to students who have completed PHY 3006 or PHY 3020.</p>	Description	n/c

Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.30 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	135190		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 3004 Physics on the computer with Python	Course	n/c
Prerequisite	MTH 2610, MTH 2205, MTH 2207 or equivalent, or more advanced calculus course	Prerequisite	MTH 2610 or more advanced calculus course (<u>MTH 2630; MTH 3006; MTH 3007; MTH 3010; MTH 3020; MTH 3030; MTH 3035; or MTH 3050</u>). <u>Not open to students who have completed PHY 2003 or PHY 3010.</u>
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This calculus based course is an introduction into classical and modern physics. The topics include Newtonian mechanics and gravitation as well as statistical physics of stochastic processes. In the laboratory students will create and run computer simulations using the programming language python to model and test physical phenomena discussed in lecture.	Description	n/c

Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.31 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	093724 (PHY 3010); 093725 (PHY 3010H)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 3010 Quantitative Physics I	Course	n/c
Prerequisite	MTH 2610 Not open to students who have completed PHY 2003 or PHY 3004	Prerequisite	<u>MTH 2610 or more advanced calculus course (MTH 2630; MTH 3006; MTH 3007; MTH 3010; MTH 3020; MTH 3030; MTH 3035; or MTH 3050).</u> Not open to students who have completed PHY 2003 or PHY 3004
Hours	4 Lecture Hours; 2 Lab Hours	Hours	n/c
Credits	5 credits	Credits	n/c
Description	<p>This course is a calculus-based study of the basic principles of quantitative physics. Topics include classical mechanics, gravitation, heat, sound, and relativity. A weekly laboratory will parallel the lectures.</p> <p>Not open to students who have completed PHY 2003 or PHY 3004.</p>	Description	n/c

Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.32 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	129409		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 3200 Methods in Theoretical Physics	Course	n/c
Prerequisite	(PHY 2003 or PHY 3010) and (PHY 3001 and PHY 3020); MTH 3020 and MTH 3030 or equivalent.	Prerequisite	(PHY 2003 or PHY 3004 or PHY 3010) and (PHY 3001 or PHY 3020).
Hours	3	Hours	n/c
Credits	3	Credits	n/c
Description	Methods of Theoretical Physics focuses on the application of mathematics, the language of science, to physics, the most mathematical of the sciences. We apply to physics the methods of differential and integral calculus of one and several variables, infinite series, complex numbers, functions of a complex variable, vector calculus, matrices, linear vector spaces and differential equations. All areas of physics are considered, including mechanics, waves,	Description	n/c

	fluids, thermodynamics, electricity, magnetism, optics, and modern physics.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.33 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	115252 (PHY 3500); 149667 (BIO 3500)		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY/BIO 3500 Biological Applications of Physics	Course	n/c
Prerequisite	(PHY 2003 or PHY 3010) and (PHY 3001 and 3020).	Prerequisite	(PHY 2003 or PHY 3004 or PHY 3010) and (PHY 3001 or PHY 3020).
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This course focuses on the application to biology and medicine of basic physics, including mechanics, waves, fluids, thermodynamics, electricity, magnetism, optics, and modern physics. Emphasis is placed on the increasing connections between the physical and biological sciences, the effectiveness of physical concepts	Description	n/c

	in explaining biomedical phenomena, and the function of medical devices and instruments.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.34 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	136973		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 4004 Statistical Physics with Applications to Mathematical Finance	Course	n/c
Prerequisite	PHY 3020 and one of the following: MTH 2610; MTH 2205; MTH 2207; MTH 2630, or equivalent or more advanced calculus course (MTH 3006, MTH 3010, or MTH 3020)	Prerequisite	<u>PHY 3004 or PHY 3010 or MTH 3020 or MTH 3030 or MTH 3050</u>
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This calculus based course is an introduction into modern statistical physics including topics with applications in finance. The main topics are statistical models in equilibrium, phase transitions, mean field approximations, kinetic theory and the approach to equilibrium, as well	Description	n/c

	as Brownian motion, anomalous diffusion, and Levy flights. In the laboratory students will create and run computer simulations using the programming language Python to model and test physical theories discussed in lecture.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.35 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	109065		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 4130 Modern Physics	Course	n/c
Prerequisite	PHY 3010 and 3020; or PHY 2003 and 3001 with permission of the instructor.	Prerequisite	(PHY 2003 or PHY 3004 or PHY 3010) and (PHY 3001 or PHY 3020).
Co-requisite	PHY 4130L	Co-requisite	n/c
Hours	3 Lecture Hours; 3 Lab Hours	Hours	n/c
Credits	4	Credits	n/c
Description	This class explores the central revolutionary ideas of special relativity and quantum mechanics. After learning the foundations and formulations of these ideas, students will be exposed to their applications in atomic,	Description	n/c

	condensed-matter, nuclear, and particle physics. The success of many of these applications will be demonstrated by laboratory experiments. Students give an oral presentation and submit a written essay on a particular topic in relativity or quantum mechanics. This course may serve as the capstone for the Tier III minor in Natural Sciences.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.36 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	129181		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 4140 Introduction to Nuclear and Particle Physics	Course	n/c
Prerequisite	PHY 3010, PHY 3020, and PHY 4130.	Prerequisite	(PHY 3010 <u>or</u> PHY 3004), PHY 3020, and PHY 4130
Hours	3	Hours	n/c
Credits	3	Credits	n/c
Description	This course focuses on our understanding of atomic nuclei and elementary particles with	Description	n/c

	emphasis on both nuclear and particle aspects of sub-atomic matter. Physics of high energy accelerators such as the Large Hadron Collider in Switzerland will be studied, as well as how particles interact with matter, which is utilized for their detection. Conservation laws and symmetries of nature will be explored and electromagnetic, weak, and strong nuclear forces will be investigated. Grand unified theories, string theory, and applications to cosmology will also be discussed.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.37 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	109066		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 4201 Astrophysics	Course	n/c
Prerequisite	PHY 3010 and 3020; or PHY 2003 and 3001 with permission of the instructor.	Prerequisite	(PHY 2003 or PHY 3004 or PHY 3010) and (PHY 3001 or PHY 3020).
Co-requisite	PHY 4201L	Co-requisite	n/c
Hours	3 lecture hours; 1.5 lab hours; 1.5 field excursion hours	Hours	n/c

Credits	4	Credits	n/c
Description	This class explores the physics behind planetary science, stellar processes, galactic dynamics and modern cosmology, as well as the techniques for making astronomical observations. The central ideas are demonstrated by both laboratory experiments and astronomical observations. Students give an oral presentation and submit a written essay on a particular topic in the subject area. This course may serve as the capstone for the Tier III minor In Natural Sciences.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

AV.1.38 Change in Course Prerequisites to be offered by the Natural Sciences Department

CUNYfirst Course ID	149657		
FROM		TO	
Department	Natural Sciences	Departments	n/c
Course	PHY 4400 Special Topics in Theoretical Physics	Course	n/c
Prerequisite	PHY 3010 and PHY 3020; or PHY 2003, PHY 3001, and PHY 3200	Prerequisite	<u>(PHY 2003 or PHY 3004 or PHY 3010) and (PHY 3001 or PHY 3020).</u>
Hours	3	Hours	n/c

Credits	3	Credits	n/c
Description	The Special Topics in Theoretical Physics course is designed to be a Capstone course for students completing any of the various tracks of the Physics Minor at Baruch. Students will apply the physics and quantitative methods learned in basic courses to get initiated into the methods of research in theoretical physics. Each student is expected to present his/her progress each week in a 2.5 hour session with the other students under the supervision of the instructor. Possible areas of concentration include Nuclear and Particle Physics, Modern Physics, or Astrophysics.	Description	n/c
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Summer 2021

Rationale: The Natural Sciences department is changing the course prerequisites for most of their upper-level offerings to streamline the registration process by replacing department permission requirements with relevant academic plans, adding alternate prerequisites, and removing unnecessary prerequisites.

Section AVI. Courses Withdrawn

AVI.1.1 BLS 1013 The Administration and the Process of Justice

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.2 BLS 1019 Introduction to Black Studies

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.3 BLS 3000 Africa After Independence

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.4 BLS 3006 Selected Social Problems of the Ghetto

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.5 BLS 3007 Planning in Urban Areas

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.6 BLS 3022 The African Independence Movement

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.7 LTS 1000 Puerto Rican Heritage: Pre-Columbia to 1898

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.8 LTS 1004 Introduction to Latino Studies

Rationale: The Department of Black and Latino Studies is retiring several courses and removing them from the College Bulletin. Faculty believe this course is dated and that the topics will be folded into existing or new courses offered by the department.

AVI.1.9 HIS 2016 Europe in the Age of Renaissance

Rationale: This course was previously raised to the 3000-level, but the old version is still active in CUNYfirst.

AVI.1.10 HIS 2041 The Colonial Period American History

Rationale: This course was previously raised to the 3000-level, but the old version is still active in CUNYfirst.

The following recommendations of the committee on Undergraduate Curriculum were approved at the Zicklin School of Business Faculty Meeting on February 18, 2021 and March 18, 2021 effective Spring 2022 semester pending approval of the Board of Trustees.

PART A: ACADEMIC MATTERS

Section All: Change in Degree Programs

All.1.1 The following revisions are proposed by the Zicklin School of Business. Effective Spring 2022

From:			To:		
Requirements that apply to all business majors: Students admitted to the Zicklin School of Business are required to complete the following courses before they can enroll in any business major courses that are 4xxx level or above.			Requirements that apply to all business majors: Students admitted to the Zicklin School of Business are required to complete the following courses before they can enroll in any business major courses that are 4xxx level or above.		
Course	Description	Crd	Course	Description	Crd
Required Courses			Required Courses		
ACC 2101	Principles of Accounting	3	ACC 2101	Principles of Accounting	3
			<u>BUS 2000</u>	<u>Business Fundamentals: The Contemporary Business Landscape</u>	<u>3</u>
CIS 2200	Introduction to Information Systems and Technologies	3	CIS 2200	Introduction to Information Systems and Technologies	3
COM 2020	Introduction to Business Communication	3	COM 2020	Introduction to Business Communication	3
			<u>COM 3021</u>	<u>Professional Speech Communication</u>	<u>1.5</u>
ECO 1001	Microeconomics	3	ECO 1001	Microeconomics	3
ECO 1002	Macroeconomics	3	ECO 1002	Macroeconomics	3
ENG 2100	Writing I	3	ENG 2100	Writing I	3
ENG 2150	Writing II	3	ENG 2150	Writing II	3
			<u>FIN 2000</u>	<u>Principles of Financial Planning and Individual Investing</u>	<u>1.5</u>
LAW 1101	Fundamentals of Business Law	3	LAW 1101	Fundamentals of Business Law	3
QNT 2020	Foundations of Predictive Analytics and Decision Modeling	3	QNT 2020	Foundations of Predictive Analytics and Decision Modeling	3
STA 2000	Business Statistics I		STA 2000	Business Statistics I	3

Rationale: It is important that students complete BUS 2000, COM 3021, and FIN 2000 before taking advanced level courses.

AIII.1.2 New Business Minor in Fintech for Business Students, to be offered by the Zicklin School of Business.

Effective Spring 2022

Minor in FinTech (12 credits)		
Course	Description	Crd
Required introductory course		
CIS 3620	Fintech: Principles and Applications	3
Elective courses (choose three courses, one from each focus area)		
Electives with Technology and data analytics focus		
CIS 3120	Programming for Analytics	3
CIS 3250	Blockchain Technologies and Applications	3
CIS 3920	Data Mining for Business Analytics	3
Electives with Finance and Economics focus		
ECO 4000	Statistical Analysis for Economics and Finance	3
ECO 4010	Applied Micro-Econometrics	3
ECO 4051	Financial Econometrics	3
FIN 3710	Investment Analysis	3
FIN 4750	Options	3
FIN 4808	Risk Management I	3
Electives with Legal, Compliance, and Policy focus		
LAW 3108	Law and E-Business	3
LAW 3230	Control Functions in Financial Institutions	3
LAW 3240	The Regulation of Financial Markets, Institutions, and Products	3
LAW 3250	Financial Regulation of Emerging Technologies	3

Rationale: Financial technology today underpins virtually all business. Students designating this minor will take a required course providing students with an introduction to financial technologies, focusing on financial services, capital markets, data analysis, and the coding and software employed in financial technology. Students then choose one course from CIS, one from Finance, and one course from Law. Each of these electives will give students in-depth knowledge and capabilities in coding, compliance, and quantitative elements of economics, finance and financial services. This 4-course minor will enhance students' employment opportunities in this rapidly expanding field.

Section AIV: New Courses

AIV.1.1

CUNYfirst Course ID			
Department(s)	Department of Law		
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate		
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial		
Subject Area	Law		
Course Prefix	LAW		
Course Number	3230		
Course Title	Control Functions in Financial Institutions		
Catalogue Description	This course examines the key elements of control functions in financial institutions, emphasizing how they have adapted to the market changes since the Financial Crisis of 2008. The course introduces and examines the way banks and other financial intermediaries measure and manage the various types of business risk to ensure that banks operate in a safe and sound manner. The course covers the overall control frameworks which establish policies, procedures, standards, and governance functions, with an emphasis on the requisite changes imposed by the crisis. Control functions studied include Human Resources, Finance, IT, Internal Audit, Legal, Treasury, Risk Management, Compliance, and the COO role. This course emphasizes case analysis, development of critical thinking skills, and oral and written communication.		
Pre/Co Requisites	Prerequisite: LAW 1101 and (BUS 1000 or BUS 1011 or BUS 2000) and (ZICK or ZKTP or official ECO-BA)		
Credits	3		
Contact Hours	3		
Liberal Arts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Course Attribute (e.g. Writing Intensive, Honors, etc)			
Course Applicability	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	<input type="checkbox"/> Gen Ed - Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	<input type="checkbox"/> Gen Ed - College Option College Option Detail _____
Effective Term	Spring 2022		

Rationale: This course has been successfully offered as a special topics course to undergraduate students for the past two years to great reviews. Students have learned a tremendous amount and the course is very useful to those planning a career in compliance, law and/or banking. The course will be offered once per year, up to 40 students.

AIV.1.2

CUNYfirst Course ID			
Department(s)	Department of Law		
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate		
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial		
Subject Area	Law		
Course Prefix	LAW		
Course Number	3240		
Course Title	The Regulation of Financial Markets, Institutions, and Products		
Catalogue Description	This course examines the legal and regulatory structures supporting the financial system in the US. This course introduces and analyzes the institutional structure of US financial markets and the way that international, federal and state-level regulation shape the industry. The course covers the laws and rules promulgated to account for potential market failure; the process by which goals become legislation, legislation begets rules; and the way rules protect market participants and enforce behavioral change. This course emphasizes case analysis, development of critical thinking skills, and oral and written communication.		
Pre/Co Requisites	Prerequisite: LAW 1101 and (BUS 1000 or BUS 1011 or BUS 2000) and (ZICK or ZKTP or official ECO-BA)		
Credits	3		
Contact Hours	3		
Liberal Arts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Course Attribute (e.g. Writing Intensive, Honors, etc)			
Course Applicability	<input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science	<input type="checkbox"/> Gen Ed - Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	<input type="checkbox"/> Gen Ed - College Option College Option Detail _____
Effective Term	Spring 2022		

Rationale: This course has been successfully offered as a special topics course to undergraduate students for the past three years to great reviews. Students have learned a tremendous amount and the course is very useful to those planning a career in compliance, law and/or banking. The course will be offered once per year, up to 40 students.

AV: Changes in Existing Courses

AV.1 Changes in Course Title and Description to be offered in the Department of Law

CUNYFirst Course ID	092414		
FROM		TO	
Departments	Department of Law		Department of Law
Course	LAW 3108 Law & the Internet	Course	LAW 3108 <u>Law and E-Business</u>
Pre or co requisite	Pre-requisite: LAW 1101	Pre or co requisite	Pre-requisite: LAW 1101
Hours	3	Hours	3
Credits	3	Credits	3
Description	The course addresses the legal issues created by the internet revolution, with an emphasis on law and e-business. Copyright and music/video piracy are studied, as is protection of database and other internet content. Trademark law and internet domain name controversies domestic and international) are addressed. Regulability, jurisdiction, and liabilities arising from internet activities are analyzed. Relationships with employees, vendors and customers are examined, and internet privacy and ethics are covered.	Description	<u>The course teaches students to conduct internet business in compliance with law and regulation. Ways in which e-businesses limit exposure to lawsuits by customers, observe privacy laws, and protect the business from lawsuits for mis-use, hacking, data-use and data breaches are addressed. The course also teaches how a business protects its innovations, intellectual property, and proprietary data from infringement, focusing on copyright, patent, and trade secrecy law. Ways in which businesses protect their reputation, good will, and internet domain names using trademark law are covered.</u>
Requirement Designation	Business	Requirement Designation	Business
Liberal Arts	[] Yes [X] No	Liberal Arts	[] Yes [X] No
Course Attribute (e.g. Writing Intensive, Honors, etc)		Course Attribute (e.g. Writing Intensive, Honors, etc)	
Course Applicability	<input type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Gen Ed Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World <input type="checkbox"/> Gen Ed – College Option College Option Detail	Course Applicability	<input type="checkbox"/> Major <input type="checkbox"/> Gen Ed Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Gen Ed Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective Term	Spring 2022		

Rationale: The course title and course description are updated in light of development in internet business and law.

ACADEMIC UNIVERSITY REPORT DETAIL ERRATA,

effective Fall 2021

<p>June 2019 Chancellor's University Report</p>	<p>SECTION AIV. New Course</p> <p>Item AIV.1.5 New course MGT 4952</p> <p>FROM: Pre/Corequisite: MGT 3950 and MGT 3951</p> <p>TO: Prerequisite: MGT 3950 and MGT 3951</p> <p><u>Rationale:</u> When filling in the prerequisites for the new course, the department overlooked the row label pre/corequisite, so did not explicitly indicate that the courses were prerequisites and not pre/corequisites. MGT 3950 and MGT 3951 are prerequisites for MGT 4952.</p>
<p>October 2020 Chancellor's University Report</p>	<p>SECTION AV. Changes in Existing Courses</p> <p>Item AV.1.1 Changes in prefix, course number, and pre-requisites to be offered in the Narendra Paul Loomba Department of Management (MGT 3121/OPM 3000)</p> <p>FROM: (ZICK or ZKTP) and (ECO 1001, ECO 1002, and STA 2000)</p> <p>TO: Prerequisite: (ZICK or ZKTP) and (ECO 1001, ECO 1002, and STA 2000)</p> <p><u>OR</u> (Pre/Corequisite: ACC 2101, LAW 1101, ENG 2100, ENG 2150, COM 1010) and (Prerequisite: 60 credits, 2.3 GPA in the 8 pre-business courses and 2.3 overall GPA)</p> <p><u>Rationale:</u> While the change of prerequisites in the October 2020 Chancellor's University Report was focused on students choosing one of the three new admission paths through our curriculum, we overlooked the change's effect on current, continuing students. Students under the old curriculum are and will continue to be allowed to concurrently enroll in OPM 3000 (formerly MGT 3121) while completing their last pre-business course(s). The portion of the prerequisites so providing was inadvertently deleted, and should be added back to allow concurrent permission for continuing students.</p>

Baruch College

Committee on Academic Policy, Programs, and Research Report Detail

May 2021

PART A: ACADEMIC MATTERS

The following recommendation of the Committee on Undergraduate Curriculum was approved at the Mildred and George Weissman School of Arts and Sciences Faculty meeting on December 1, 2020, at the Marxe School of Public and International Affairs Faculty meeting on February 11, 2021, and at the Zicklin School of Business Faculty meeting on February 18, 2021 effective the Spring 2022 semester, pending approval of the Board of Trustees.

Section AV. Changes in Existing Courses

AV.1.1 Change in Course Prerequisite and General Education Curriculum Status to be offered by the Psychology Department.

CUNYfirst Course ID	136991		
FROM		TO	
Department	Psychology	Department	n/c
Course	PSY 2100 Social Statistics	Course	n/c
Prerequisite	One of the following courses: MTH 1023; MTH 1030; MTH 2000; MTH 2001; MTH 2003; MTH 2009; MTH 2205; MTH 2206; MTH 2207; MTH 2610; or any MTH course at the 3000-level or above. Neither MTH 2140 nor 2160 serve as a prerequisite for this course.	Prerequisite	One of the following courses: MTH 1023; <u>FSPM 1023</u> ; MTH 1030; <u>FSPM 1031</u> ; MTH 2000; MTH 2001; MTH 2003; MTH 2009; MTH 2205; MTH 2206; MTH 2207; MTH 2610; or any MTH course at the 3000-level or above. Neither MTH 2140 nor 2160 serve as a prerequisite for this course.
Hours	4	Hours	n/c
Credits	3	Credits	n/c
Description	This course is an introduction to statistical concepts and methods of organizing, presenting, and analyzing quantitative data used in the conduct of scientific research. Topics include measurement scales; descriptive statistics; basic probability and probability distributions; concepts of sample, population, and sampling distribution; elements of statistical inference; correlation; regression; one-sample and two-sample t-tests; and analysis of variance. The following distributions are examined and applied to the solution of problems: binomial, normal, t,	Description	n/c

	and F distributions. Techniques for using statistical software as a tool to analyze data will be introduced. This course is not open to students who have taken BIO/ENV 2100, STA 2100, or STA 2000, and is not an option for BBA majors. PSY 2100 cannot be used in lieu of STA 2000 to satisfy pre-business core requirement for a Zicklin major, or to satisfy the prerequisite for any intermediate or advanced statistics course. STA 2100 and PSY 2100 may substitute for each other in the F-replacement policy.		
Requirement Designation		Requirement Designation	
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc.)		Course Attribute (e.g. Writing Intensive, WAC, etc.)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World	General Education Component	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input checked="" type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World
Effective		Effective	Spring 2022

Rationale: PSY 2100 is being added to the Mathematical and Quantitative Reasoning (MQR) area of the Pathways Required Core to give students more options to satisfy this degree requirement. The course meets the University requirements for MQR courses and was approved by the CCCRC on March 5, 2021. FSPM 1023 Intermediate and College Algebra and FSPM 1031 College Algebra, the free zero-credit summer immersion versions of MTH 1023 and MTH 1030, are being added to the possible prerequisite course list as they were omitted in error.