1 2 3 4 5 6 7	Minutes of Lehman College Senate Meeting Wednesday, March 28, 2018
8 9 10 11 12 13 14 15 16	Senators Present: Acevedo, J.; Alborn, T.; Arias Bueno, M.; Atif, I.; Austin, L.; Baba, N.; Badillo, D.; Bergmann, R.; Bhuiya, S.; Blachman, S.; Budescu, M.; Burt, K.; Burton-Pye, B.; Campeanu, S.; Capote, N.; Cheng, H.; Clark, V.; Crawford, S.; Cruz, J.; Deckman, S.; Encarnacion, D.; Farrell, R.; Fayne, H.; Fera, J.; Forde, A.; Hyman, D.; Johnson, M.; Jordan, S.; Mak, W.; Manier, D.; Marianetti, M.; Markens, S.; Marshall, A.; Martín, Ó.; McCabe, J.; McKenna, C.; McNeil, C.; Oh, H.; Phillips, M.; Prince, P.; Prohaska, V.; Rampersaud, W.; Registe, K.; Rivera-McCutchen, R.; Rosario, Y.; Sailor, K.; Sarmiento, R.; Sauane, M.; Schlesinger, K.; Scott, K.; Sen, G.; Singh, S.; Sisselman, A.; Tananbaum, D.; Trimarchi, Y.; Valentine, R.; Wangerin, R.; Wynne, B.; Yates, S.; Yavuz, D.
 17 18 19 20 21 22 23 24 25 26 	Senators Absent: Ali, T.; Amend, A.; Assoumanou, S.; Bazile, S.; Cabrera, S.; Calderon, P.; Conner, P.; DeJaynes, T.; DiBello, M.; DiRaimo, S.; Doyran, M.; Eleyinafe, O.; Eshun, Y.; Feliz, M.; Finger, R.; Gerry, C.; Gilles, Z.; Gomez, E.; Graulau, J.; Gyeabour, K.; Jeronimo, C.; Latimer, W.; Machado, E.; MacKillop, J.; Magdaleno, J.; Mathew, J.; Mayi, A.; Munch, J.; Nolli Gasper, S.; Okechukwu, I.; Pettipiece, D.; Rice, A.; Sabab Sawonto, M.; Salazar, S.; Shanley, D.; Sosnovskiy, O.; Trujillo, K.; Ulysse, V.; Wright, C.
27	
28	1. <u>Approval of the Minutes</u>
29 30	The minutes of the February 7, 2018 Senate meeting were approved by unanimous voice vote.
31	2. <u>Announcements and Communications</u>
32	a. Report of the President
33	Dr. Cruz welcomed all to the first meeting of the spring semester and outlined some very
34	important updates, which were part of an email message distributed to the campus
35	community. He announced the appointment of Harriet Fayne as the College's Provost and
36	Vice President for Academic Affairs. He expressed his confidence that Dr. Fayne would
37 38	exhibit the same determination, collegiality, and respect for shared governance she has exhibited thus far, moving forward.

40 Dr. Cruz also highlighted that, at the last meeting of the Board of Trustees, the Board 41 approved an honorary doctorate degree in humane letters for Prof. Jacob Judd; he explained 42 that the degree would be awarded to Prof. Judd at the College's 50th anniversary 43 commencement ceremony.

45 Dr. Cruz invited all to a screening of *Deportados*, a documentary sponsored by CNN en 46 Español, which would touch on the immigration experience in America. He also informed 47 all that there would be a panel discussion following the film. The event was scheduled to 48 take place in the Lovinger Theatre at 7:00 p.m.

49

50

55

44

b. Student Legislative Assembly—

51 Mr. Jose Acevedo thanked the Vice President for Student Affairs, José Magdaleno, for 52 attending a meeting of the Student Legislative Assembly and for offering ways in which to 53 address the issues that were discussed. Mr. Acevedo also congratulated Dr. Fayne on her 54 appointment as Provost of Lehman College.

56 Mr. Acevedo discussed that there was some confusion among committee chairs in assigning 57 students to standing committees. Mr. Acevedo explained that he would consult with 58 Professor Duane Tananbaum of the Governance Committee for further information on how 59 to address the matter.

- Mr. Acevedo also shared student interest in having a designated time period for "midterms."
 This interest would be explored with Provost Fayne and an update would be provided at a
 future Senate meeting.
- 64

60

65 **<u>REPORTS OF STANDING COMMITTEES-</u>**

- 66
- 67 **1. Graduate Studies**

Professor Carl Mazza presented proposals for curriculum changes in the Department of Music,
Multimedia, Theatre, and Dance as well as the Department of Middle and High School Education.

- 70
- 71 The proposals were approved by unanimous voice vote.

72	
73	See Attachment I
74	
75	The next meeting was scheduled for Wednesday, April 18, 2018 at 11:00 a.m. in Carman, B33.
76	
77	2. Governance Committee
78	Professor Duane Tananbaum presented Professor Chul-Young Roh, of the Health Sciences
79	Department, as a nominee to fill a vacancy on the Libarary, Technology, and Telecommunication
80	Committee. The nomination of Prof. Roh was approved by unanimous voice vote.
81	
82	Prof. Tananbaum explained that the Governance Committee would be soliciting nominations for
83	senate committees for two-year terms to start next fall. He also informed all that nominations would
84	conclude on Friday, March 30, 2018.
85	
86	Prof. Tananbaum announced that the committee was in the process of soliciting nominations for
87	the pathways revisions subcommittees. He explained that the committee would solicit brief
88	statements from each nominee and circulate such to all before the next meeting of the Senate.
89	See Attachement II
90	
91	The next meeting was scheduled for Wednesday, April 11, 2018 at 11:00 a.m. in Carman 201.
92	3. Committee on Admissions, Evaluations and Academic Standards
93	Professor Penny Prince presented the recommendation of a posthumous degree for Yoryi Joel
94	Dumais. The recommendation was approved by unanimous voice vote.
95	
96	Dr. Cruz expressed that it was a great privilege and honor to move forward with a posthumous degree
97	for Yoryi Dumais, who understood the value of what it meant to be an academic; he explained that
98	the degree would hopefully be conferred to the family of Yoryi Dumais at the 50 th anniversary
99	commencement ceremony.
100	
101	Prof. Prince reported on the CUNY Policy on AP course equivalencies as well as math waivers and
102	substitutions for individuals with disabilities. Prof. Prince also informed all that the committee had

103	developed a subcommittee to address the issues surrounding admissions criteria. The subcommittee
104	members are as follows: cochairs Linda Sheets and Sandra Campeanu, Liliana Calvet, Dimitri
105	Karabali, Jennifer MacKenzie, Hari Pant, and Kevin Sailor.
106	
107	See Attachment III
108	
109	4. Undergraduate Curriculum
110	Professor Vincent Prohaska presented proposals for curriculum changes in the following
111	departments: Biological Sciences; Health Sciences; Latin American, Latino, & Puerto Rican studies;
112	Languages and Literatures; Middle & High School Education; Music, Multimedia, Theatre, &
113	Dance; Sociology; and Social Work.
114	
115	The proposals were approved by unanimous voice vote.
116	
117	Prof. Prohaska presented an informational item for an experimental course. He also presented an
118	informational item on the development of a subcommittee to address major and minor policies on
119	courses.
120	
121	See Attachment IV
122	
123	The next meeting was scheduled for Wednesday, April 18, 2018 at 1:00 p.m. in SC 1405A.
124	
125	
126	5. Academic Freedom
127	There was no report. Professor David Manier informed all that the Hans-Joerg Tiede Lecture,
128	Academic Freedom in the Age of Trump, would be rescheduled for the fall due to its cancellation
129	on March 21, 2018.
130	
131	Prof. Manier also discussed the issue of far-right media outlets that may contact the College to
132	organize email campaigns that would target members of the faculty. He explained that the committee
133	would develop ways in which to address such issues and would recommend language to media
134	relations on how best to handle situations of this nature.

135	
136	The next meeting was scheduled for Wednesday, April 25, 2018 at 4:45 p.m. in Gillet Hall, room
137	103.
138	
139	6. Library, Technology, and Telecommunication
140	Professor Stephen Castellano presented the report and discussed announcements from the Library,
141	Division of Information Technology, and Blackboard.
142	
143	See Attachment V
144	
145	7. Campus Life and Facilities
146	There was no report. Mr. Wil Rampersaud expressed that the committee would continue to address
147	campus life and facilities-related issues. Mr. Ramersaud also commented on issues such as the pest
148	problem on campus, the wearing down of equipment at the APEX, and issues involving sound
149	equipment.
150	
151	The next meeting was scheduled for Wednesday, April 18, 2018 at 2:00 p.m. in Shuster B018.
152	
153	8. Budget and Long-Range Planning
154	Professor Haiping Cheng discussed the reports of the Provost, Harriet Fayne, and the Vice President
155	of Administration and Finance, Vincent Clark, at the meeting of the Joint Committee of Senate,
156	FP&B, and Budget and Long-Range Planning. Prof. Cheng also presented the midyear budget report
157	for the 2018 fiscal year.
158	
159	See Attachment VI
160	
161	The next meeting was scheduled for Wednesday, May 2, 2018 at 1:00 p.m. in Shuster 336.
162	
163	9. University Faculty Senate Report
164	Dr. Janette Tilley reported on the March 13, 2018 Plenary Session of the University Faculty Senate.
165	
166	See Attachment VII

167	
168	The next meeting was scheduled for Tuesday, April 24, 2018 at 6:30 p.m.
169	
170 171 172 173	<u>Old Business</u> None. <u>New Business</u> None.
174 175	ADJOURNMENT
176	The meeting was adjourned at 4:45 p.m.
177	Respectfully submitted:
178	
179	Cynthia Cessant



President's Report Lehman College Senate

José Luis Cruz @LehmanPresident March 7, 2018

Advocacy

On March 6th, I will travel to Albany with the presidents of Hostos and Bronx Community College to meet with the Bronx delegation of the New York State Assembly. I am also scheduled to meet privately with Lehman College's State Senate representative, Jeffrey Klein, and later with Senator Kenneth LaValle, chair of the Senate Committee on Higher Education, and Assembly Higher Education Chair Deborah Glick.

Meeting with Bronx Borough President

I had a very productive meeting last week with Borough President Rubén Díaz, Jr. to discuss the College's capital funding request. We hope to hear some positive news on that front shortly.

Vice President for Institutional Advancement

I was recently pleased to announce that I have recommended the appointment of Susan E. Ebersole to the role of Vice President for Institutional Advancement and Executive Director of the Lehman College Foundation, effective March 22nd. Ms. Ebersole brings more than two decades of experience and demonstrated success in fundraising and external relations to this position. She currently serves as Director of Leadership Gifts for the New York Philharmonic, where she is responsible for more than \$6 million in annual giving.

Interim Executive Counsel and Labor Designee

As I announced last week, Dennis DaCosta has stepped down from the role of Executive Counsel and Labor Designee. Esdras Tulier will serve in this position in an interim capacity, effective April 2nd. I am grateful to Dennis for his thoughtful counsel and demonstrated commitment to advancing our work.

Many of you know Es from his time at Lehman as Special Counsel to the President, a position he held from 1999 to 2012. He currently serves as the University's Deputy to the Vice Chancellor for Human Resources Management. Please join me in welcoming Es back to the Lehman campus community.

Reception for NSF Submission of CUNY Louis Stokes Alliance for Minority Participation Grant

Last week, we hosted a wonderful reception to celebrate the submission of our University's LSAMP grant proposal, for which Lehman is proud to serve as lead. We worked with our colleagues from across 12 CUNY campuses under a tight deadline to deliver a superb proposal and program redesign to the NSF. Our cross-college collaboration made it evident to me that we have the foundation for many successful partnerships, as we share a common commitment to provide transformative opportunities to our talented students. Thanks to all members of the Lehman community who shepherded this effort. I will let you know when we learn NSF's decision.

Partnership with World Science Festival/City of Science

Lehman College will be the Bronx host for the City of Science event to be held on Sunday, March 11th. This fun and engaging event, which makes stops in all five boroughs in the course of a year, includes science, tech, engineering and math stations for all ages. The World Science Festival organizes the event and is looking for volunteers for the day; if you know of anyone who is interested, please contact volunteers@worldsciencefestival.com. We are working with the organizers to develop a comprehensive plan to enhance science teaching and learning opportunities in the Bronx.

Points of Pride

Urban Social Work, a journal sponsored by Lehman and Morgan State University, recently won honorable mention in the "Best New Journal in Social Sciences" category of the 2018 PROSE Awards, sponsored by the Association of American Publishers.

Our basketball teams had a stellar season, with our men's team winning the CUNYAC regular-season championship with a 22-5 season and a 14-game winning streak. The post-season championship went to College of Staten Island in a 77-75 nail-biter. Our women's basketball team also had a strong showing, earning a number-two seed in the CUNYAC with a 14-2 season. Congratulations Lightning!

Our Black History Month programs garnered local and citywide coverage, and our Center for Human Rights and Peace Study's conference on artists' perspectives of the Syrian civil war also received media attention. Congratulations to the organizers of these thought-provoking and well-attended events.

Senate Governance Committee Report

3/7/18

The Governance Committee nominates Chul -Young Roh of the Health Sciences Department to fill the vacancy on the Senate Library, Technology, and Telecommunications Committee created by Stefanie Havelka's departure from the college.

Professor Tananbaum will be sending an email to faculty and staff soliciting nominations for Senate committees. The Governance committee will compile a slate of nominees at its next meeting in April.

The committee urged student representatives to meet with the Deans and Executive Committees of the School to voice their concerns about course scheduling.

The next meeting of the Governance Committee was scheduled for 4/11/2018 at 11:00 A.M in CA 201.

EHMAN LATIN AMERICAN AND LATINO STUDIES Carman Hall Room 284

250 Bedford Park Blvd West Fax: 718-960-7804 Bronx, NY 10468

Phone: 718-960-8280 www.lehman.edu

Posthumous Degree – Mr. Yoryi Joel Dume

COLLEGE

WHEREAS, Herbert H. Lehman College of The City University of New York shares with the family and friends in the loss of Mr. Yoryi Joel Dume; and

WHEREAS, Mr. Dume was a senior Latin American and Caribbean Studies major at Lehman College who was in excellent standing; was a student who distinguished himself as a scholar and researcher; was a future professional whose dedication to academia would have made the Department of Latin American and Latino Studies and Lehman College proud; and

WHEREAS Mr. Dume was a distinguished member of the Lehman Scholars Program; was a recipient of a Lehman Foundation scholarship; was an outstanding contributor in each of the Lehman Scholars Seminars he participated in; sparked, broadened, and deepened discussions of controversial matters everywhere he went, sharing his knowledge and insights with excitement and gusto with everyone involved; and

WHEREAS, Mr. Dume completed his Lehman Scholars Honors Thesis with distinction; researched the political, social, cultural, and economic meaning of the border region between Tabatinga, Brazil and Leticia, Colombia; made an original contribution to the field of Border Studies and to the ideas of nationalism and transnationalism with this work; and

WHEREAS, Mr. Dume was a recipient of a prestigious Benjamin A. Gilman International Scholarship to study abroad in Rio de Janeiro, Brazil; worked hard and with perseverance to meet the high academic goals he set for himself; applied to the Fulbright fellowship; was fluent in Portuguese and was applying for Boren Scholarships, an initiative of the National Security Education Program, to acquire professional command of Portuguese; and

WHERAS, Mr. Dume was a trusted friend, a committed mentor to emerging scholars, a constant source of optimism, an example of perseverance; and

WHEREAS, the faculty, staff and students of the Department of Latin American and Latino Studies have requested that Mr. Yoryi Joel Dume be awarded a posthumous degree; and

WHEREAS, the Chair of the Department of Latin American and Latino Studies and the Dean of the School of Arts and Humanities have recommended Mr. Dume be granted a posthumous degree; and

WHEREAS, the Provost has reviewed the recommendation and supports the granting of a posthumous degree to Mr. Dume; and

WHEREAS, the Committee on Admissions, Evaluation and Academic Standards has reviewed the recommendation and support awarding a posthumous degree to Mr. Dume, therefore be it

RESOLVED, that the Herbert H. Lehman College Senate, comprised of faculty, students, and administrators, hereby recommends that President José Luis Cruz confer a posthumous Bachelor of Arts degree to Mr. Yoryi Joel Dume.



Senate Meeting of March 28, 2018

CAEAS Report on AP Policy at Lehman College, March 28, 2018

The attached CUNY CENTRAL document regarding the CUNY AP policy, dated February 14, 2018, was brought to CAEAS' attention on March 20. Previously, our committee had convened to discuss an earlier (June 28, 2017) policy *suggestion* by CUNY regarding this issue. Here is the background:

Lehman departments have traditionally determined student course waivers based on the AP grade they felt was appropriate, in most cases, a *4 or a 5*. On June 28, 2017, CUNY Central sent a suggestion that we *may have flexibility* regarding that grade, saying that at some CUNY's, a *3* was accepted. Our committee contacted the Deans at Lehman and requested that they discuss this matter with their faculty. Based upon the responses we received, and the consensus of our own committee, we determined there ought to be a definite, set number, and we voted that that number be a *4 or 5*. However, on March 20, 2018, we received a February 14, 2018 CUNY Central directive reversing the policy, stating that all CUNY colleges shall accept a score of *3* when admitting students. The only leeway we have is in having departments each determine how this will translate into its courses: a department may choose to view that AP course as equivalent to an Elective rather than a required course for the major, etc. Each department, therefore, is asked to formulate a plan for how an AP score of *3 or 4 or 5* will be utilized, and send it through the Governance process.



Executive Vice Chancellor and University Provost

205 East 42nd Street New York, NY 10017 Tel: 646-664-8075 Fax: 646-664-2967 academicaffairs@cuny.edu

TO: Chief Academic Officers

FR: Vita Rabinowitz, Executive Vice Chancellor and University Provost

RE: AP Policy Clarification and Refinement

DT: February 14, 2018

At its June 26, 2017 meeting, the CUNY Board of Trustees approved a resolution to revise the University's policy on the awarding of academic credit for Advanced Placement (AP) examinations administered by the College Board. This memo seeks to clarify and refine some important aspects of this policy revision to improve operations and transparency. The intent of the resolution was to have CUNY's AP policy align with state and national standards and practice regarding awarding of credit for AP test scores of 3 and above while preserving faculty/departmental discretion regarding the particular courses for which credit is awarded.

To align with common practice, all CUNY colleges shall grant academic credits to any student earning a score of 3 or higher on any AP examination. The colleges, in consultation with faculty in the discipline corresponding to the individual AP exams, shall determine how those credits are applied to the degree. The college can award credits as the equivalent of a specific course, as fulfilling a general education category or as elective credits. Faculty, or the appropriate academic department, shall award the credit differently based upon the score earned on the exam. For example, a student earning a grade of 5 on a modern language exam may be awarded credit for an advanced level course; a student earning a 4 may earn credit for an intermediate level course and a student earning a 3 may earn credit for an elementary level language course or an elective. Specific determinations of how credits are awarded are entirely within the colleges' purview.

Following campus governance procedures, colleges should examine all AP exams and determine the appropriate course equivalencies for scores of 3 and above. Such course equivalencies should be in place and made available to students seeking accurate credit transfer information on your college web site *prior to Fall 2018*. For AP exams without an equivalency, the college Transfer Credit Evaluators will make a determination. Students are entitled to this information when making decisions regarding college choice. Course details on each of the AP exams offered by the College Board is available here: https://apstudent.collegeboard.org/apcourse

Below are two examples of how this can be done and made available to students.

University of Buffalo: <u>http://registrar.buffalo.edu/tc/pdfs/APchart.pdf</u> SUNY Oneonta: <u>https://suny.oneonta.edu/admissions/freshman/college-credit/advanced-placement-ap-exam-equivalents</u>

Cc: Office of the Chancellor Vice Chancellor of Student Affairs University Faculty Senate Chair Assistant Vice Chancellor for Enrollment Strategy and Management University Executive Registrar

CU Office of the University Registrar

Policies & Procedures Memorandum

To: College Registrars and Directors of Admissions

From: Vivek Upadhyay, University Registrar

Revised Policy for Course Credit based on Scores on Advanced Placement Tests

To achieve uniformity in the University's approach in awarding transfer credit award and to allows colleges greater discretion in evaluating Advanced Placement (AP) credit for transfer, and ensure that such course credit be granted only when a student has demonstrated mastery of the subject, the Committee on Academic Policy and Program Review recommended, and the University Board of Trustees approved, a revised, policy that affects the minimum score required to grant course credit. All undergraduate colleges at the University may grant course credit for AP courses offered in secondary schools, provided the student scores 3 or above on the AP test.

This resolution supersedes the February 25, 2013 resolution on AP placement. For further explanation of the reasons for this change, please see the policy documentation in the June 26, 2017 Board of Trustees minutes at http://policy.cuny.edu.

The new policy will become effective June 26, 2017, for the Fall 2017 entering class, it may also be applied to any currently enrolled students on a case-by-case basis.

Please contact Office of the University Registrar at **our@cuny.edu**, should you have any questions or need more information.

Cc: Chancellor Chancellor's Cabinet University Dean of Enrollment University Dean of Institutional Research and Assessment University Dean of Undergraduate Studies University Director of Admission Enrollment Management Council Members

> Office of the University Registrar 205 East 42nd Street, 8th Floor | New York, NY 10017 | our@cuny.edu | cuny.edu/registrar

June 28, 2017

Advanced Placement (AP) exams evaluated for external credit at Lehman College: (Effective Fall 2013, only scores of <u>4</u> or <u>5</u> achieved on AP exams are considered)

AP Exam Title	Lehman Equivalent & Credits Awarded
Art History	ARH 167 (3crs)
Biology	BIO 166 (4crs) & BIO 167 (4crs)
Calculus AB	MAT 175 (4crs)
Calculus BC	MAT 175 (4crs) & MAT 176 (4crs)
Chemistry	CHE 166/167 (5crs) & CHE 168/169 (5crs)
Chinese Language	CHI 2000 (3crs)
Comp.Gov/Politics	POL 268 (3crs)
Computer Science	CIS 166 (4crs)
*English Language/Comp.	ENG 111 (3crs)
English Literature/Comp.	ENG 222 (3crs)
Environmental Science	ENV 210 (3crs)
European History	HIS 241 (3crs) & HIS 242 (3crs)
French Language	FRE 2000 (3crs)
German Language	GER 2000 (3crs)
Human Geography	GEH 101 (3crs)
Italian Language	ITA 2000 (3crs)
Japanese Language	JAL 2000 (3crs)
Latin Language	LAT 2000 (3crs)
Music Theory	MST 100 (3crs)
Physics 1	PHY 131 (3crs)
Physics 2	PHY 166 (5crs) & PHY 167 (5crs)
Physics C	PHY 168 (5crs) & PHY 169 (5crs)
Psychology	PSY 166 (3crs)
Spanish Language	SPA 2000 (3crs)
Spanish Literature	SPA 2001 (3crs)

Statistics	MAT 132 (4crs)
Studio Art 2-Dim.Design	ART 101 (3crs)
Studio Art 3-Dim.Design	ART 102 (3crs)
Studio Art – Drawing	ART 100 (3crs)
U.S. Gov/ Politics	POL 166 (3crs)
U.S. History	HIS 243 (3crs) & HIS 244 (3crs)
World History	HIS 246 (3crs) & HIS 247 (3crs)

*Macaulay Honors and LSP students who receive a passing score on the ENG Lang/Comp AP exam, but are registered in the Lehman Honors section of ENG 111, will receive 3 elective credits designated as ENG 1000.



Executive Vice Chancellor and University Provost

205 East 42nd Street New York, NY 10017 Tel: 646-664-8075 Fax: 646-664-2967 academicaffairs@cuny.edu

Date: February 15, 2018

To: Chief Academic Affairs Officers

From: Vita Rabinowitz, Executive Vice Chancellor and University Provost Re: Math Waiver and Substitution Based on Disability Policy

I write to inform you about an important policy change regarding CUNY's requirement that all students demonstrate college readiness in math. Attached please find the final version of CUNY's Math Waiver Policy for students whose disabilities impact their ability to meet CUNY math requirements.

As you are aware, some students are unable to fulfill the math requirements because of factors related to a disability. In accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, students who cannot meet the CUNY math requirement, even with accommodations, may now request a waiver of the requirement to demonstrate college readiness in math by passing elementary algebra (or an equivalent alternative). They may also request a substitution for the Pathways quantitative reasoning requirement.

In accordance with the principles of Pathways, a math waiver will transfer with the student, either from a community college to a senior college or from one college to another. This math waiver will be recorded in CUNYFirst as an accommodation and will be visible to CUNY disability coordinators on each campus. Before graduating, or transferring to another CUNY college, the student is advised to ensure this action has been recorded in CUNYFirst.

There is an exception to this policy: a college will not consider a math waiver or course substitution in majors or programs in which math is an essential requirement.

For more information on any aspect of this Math Waiver Policy, please contact Interim Vice Chancellor for Student Affairs Christopher Rosa at <u>christopher.rosa@cuny.edu</u>.

My thanks to the Council on Student Disability Issues (COSDI), the Office of the General Counsel, the Office of Assessment, the Office of Student Affairs, and the University Faculty Senate for their guidance in the development of this policy.

Cc: Chancellor James B. Milliken Chief Student Affairs Officers University Dean for Undergraduate Studies, Lucinda Zoe Senior Associate General Counsel, Katherine Raymond University Registrar, Vivek Upadhyay University Executive Director for Enrollment Strategy and Management, Laura Bruno

Math Waivers and Substitutions Based on Disability

All students attending CUNY must demonstrate college readiness in math based on either SAT, ACT, or New York State Regents test scores. Students who do not demonstrate college readiness in math based on one of those measures are required to take the CUNY Assessment Test in Math. Students who do not achieve passing scores are required to complete developmental education courses or other similar interventions. Completing this math requirement is a prerequisite to taking courses to meet the Pathways quantitative reasoning requirement.

Some students are unable to fulfill the aforementioned requirements because of a disability. CUNY provides accommodations, including academic adjustments, to students with disabilities in order to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act of 1990. Students who wish to seek such accommodations must register with the college's office of disability services. Accommodations for the CUNY math assessment test and for coursework, including remedial math coursework, often include extended time, assistive technology support, and/or services of appropriate support personnel such as readers, scribes, and sign language interpreters.

Students who cannot meet the CUNY requirement, even with accommodations, may request a waiver of the requirement to demonstrate college readiness in math by passing elementary algebra (or an equivalent alternative). They may also request a substitution for the Pathways quantitative reasoning requirement.

In order to maximize their educational options, students must take the CUNY Assessment Test in Math at least once and must make at least one attempt to successfully complete one math or quantitative reasoning course, unless documentation indicates an inability to take and pass a math or quantitative reasoning course even with accommodations and support services. The student must meet the attendance requirements of the course or intervention, as determined by the instructor and college policy.

The procedure for requesting a waiver of the requirement to demonstrate college readiness in math and/or substitution for the quantitative reasoning requirement is as follows:

- The student submits a request form to the school's office of disability services, accompanied by documentation from an appropriately credentialed professional, certifying that the student has a disability that significantly impairs his/her ability to take and pass a math course. The request form must be signed by the student and contain an affirmation that the student understands that a math waiver or substitution may preclude the student from enrolling in certain majors or programs for which math is an essential requirement.
- 2. The office of disability services will review the student's request form and documentation. If the office determines that a math waiver or substitution is supported, the office will send the request to the College's Chief Academic Officer or Provost. Following an appropriate academic review, the Chief Academic Officer or Provost will make the final determination with respect to the waiver or substitution request and will notify the office of disability services of the decision. The offices of disability services will have the responsibility of communicating the decision to the student.
- 3. Under Pathways, all students are required to complete coursework to fulfill the quantitative reasoning requirement. Students receiving a substitution for the Pathways quantitative reasoning coursework should be given the opportunity to engage in a strong quantitative

learning experience to fulfill this requirement. One option is substitution of another course, outside of the designated Pathways QR courses, that has a sufficient quantitative component. Another option is to have the student complete, under the design and supervision of faculty, an appropriate college-level independent study that provides a quantitative experience for the student. Such experiences can include several writings or projects about quantitative people, practices, or ideas. CUNY colleges already provide a wide range of existing independent study topics meeting this general guideline, examples of which are presented in the Appendix below.

4. The school's office of disability services will enter the appropriate CUNY code into the student's CUNYFirst record, which will only be accessible by that office, showing that a math waiver has been granted CUNY-wide. Students whose record contains this waiver code will be able to register for courses to meet the Pathways quantitative reasoning requirement and the requirement fulfilled.

Because a college will not consider a math waiver or course substitution in majors or programs in which math is an essential requirement, students who are seeking a math waiver or course substitution are strongly advised to meet with counselors or academic advisors to discuss the impact of a waiver/substitution on their college major and career plans.

APPENDIX

Below is a sample rubric for an independent study, which includes possible areas of study. The faculty member makes all decisions relating to an independent study to fulfill the quantitative reasoning requirement.

Goals of the independent study: The student will explore quantitative topics in order to develop an understanding of the role of mathematics and quantitative ideas in various settings. This exploration could include topics chosen from historical figures, topics in mathematics and quantitative disciplines, the role that mathematics plays in other disciplines, areas of mathematics not related to algebra, and the role of mathematical and quantitative ideas in various cultures.

Working under the supervision of a faculty member, a student can explore topics such as

- a. Women in Mathematics
- b. Mathematics of the Rubik's cube
- c. The Navajo Code Talkers
- d. Geometry in different cultures
- e. Different calendars or number systems (for example Aztec, Mayan, or Roman)
- f. Mathematics and games
- g. Preferential Voting methods
- h. Fibonacci Sequences and nature
- i. Music and Mathematics
- j. Cryptography and the Internet
- k. The history and calculation of the number pi
- I. The Ishango bone: the oldest mathematical artifact
- m. The Platonic Solids
- n. History of the number zero

At the beginning of the study, faculty should share with the student a detailed explanation of the number, timing, and submission format of all assignments and methods of evaluation.

Senate Meeting – March 7, 2018

Proposed Graduate Studies Report

On behalf of the Graduate Studies Committee, I'd like to put forth proposals from the following departments:

Department of Music, Multimedia, Theatre and Dance

• Course change: MSP 760

Department of Middle and High School Education

• Degree changes: MS in Secondary Science Education

Does anyone have any questions and/or comments? All those in favor say I. Anyone opposed? Any abstentions?

Our next grad studies meeting is Wednesday, April 18, 2018, at 11 a.m. in Carman, B33. This is the last meeting to have graduate proposals approved before the end of the semester.

LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

Name of Program and Degree Award: Masters of Science in Secondary Science Education, Science Education Advanced Sequence Hegis Number: 0834.00 Program Code: 92094 Effective Term: Fall 2018

1. <u>Type of Change</u>: Change in Degree Requirements and Change in Credits

2. <u>From</u>:

Science Education Advanced Certificate (21-24 Credits)

This program is designed for candidates who already have a bachelor's and a master's degree in Biology, Chemistry, Geology, or Physics and who seek New York State Certification in one of the following content areas: Biology, Chemistry, Earth Science, and Physics, Grades 7-12.

Program Requirements

Students must consult with an adviser in the Science Education program before starting their certificate program. During their first semester, matriculated students are required to plan their program with a Science Education adviser. All students must complete the 21 to 24-credit curriculum below. In order to be recommended for NYS certification at the completion of the Certificate Program, candidates must pass the Educating All Students (EAS), Teacher Performance Assessment (edTPA), and the CST in one of the sciences, and meet any additional New York State requirements.

Admission Requirements

- 1. Possess a bachelor's degree (or its equivalent) from an accredited college or university that meets New York State's requirements for a general education core in liberal arts and sciences.
- 2. Possess an approved master's degree in an appropriate content area. Have completed a minimum of 36 credits in biology, chemistry, geology, or physics.

- 3. Demonstrate the ability to pursue graduate study successfully by having a master's Grade Point Average of 3.0 or better.
- 4. Satisfy the content requirements for New York State initial certification.
- 5. Submit scores on the NYS Content Specialty Test (CST.)
- 6. Submit two (2) letters of recommendation and a 500-word essay on career goals.
- 7. Participate in an interview.
- 8. Meet additional Departmental, divisional, and New York State requirements, if any.
- 9. If conditionally admitted, make up requirements starting in the first semester and finishing in no more than three consecutive semesters.
- 10. Submit scores of the Graduate Record Examination (GRE) revised general test, i.e., verbal reasoning, quantitative reasoning, and analytical writing.

Curriculum

The 21- to 24-credit certificate curriculum consists of two instructional areas:

I. Core Education Sequence (12-15 credits):

ESC 501 ESC 502 ESC 529	Psychological Foundations of Education Historical Foundations of Education: A Multicultural Perspective Language and Literacies Acquisition in Secondary Education	3 3 3	
ESC 595	Internship in Classroom Teaching		
ESC 611	and Teaching Internship in Secondary Education or	1	
ESC 596	Student Teaching in the Middle and High School Grades	3	
ESC 612	and Seminar in Secondary Student Teaching	3	
II. Methods, Curriculum, and Instruction (9 credits):			
ESC 519 ESC 506	Teaching Science in Middle and High School Special Needs Education in TESOL and Secondary Settings	3 3	
And 3 additional credits to be selected in consultation with the Program Coordinator from the following courses:			
	a Museum as a Resource for Teaching Science	З	

ESC 767 The Museum as a Resource for Teaching Science 3 ESC 707 Methods of Teaching Science in Secondary Schools: Selected Topics 3 ESC 767: Or equivalent

3. <u>To</u>:

Science Education Advanced Certificate (24 Credits)

This program is designed for candidates who already have a bachelor's and a master's degree in Biology, Chemistry, Geology, or Physics and who seek New York State Certification in one of the following content areas: Biology, Chemistry, Earth Science, and Physics, Grades 7-12.

Program Requirements

Students must consult with an adviser in the Science Education program before starting their certificate program. During their first semester, matriculated students are required to plan their program with a Science Education adviser. All students must complete the 24-credit curriculum below. In order to be recommended for NYS certification at the completion of the Certificate Program, candidates must pass the Educating All Students (EAS), Teacher Performance Assessment (edTPA), and the CST in one of the sciences, and meet any additional New York State requirements.

Admission Requirements

- 1. Possess a bachelor's degree (or its equivalent) from an accredited college or university that meets New York State's requirements for a general education core in liberal arts and sciences.
- 2. Possess an approved master's degree in an appropriate content area. Have completed a minimum of 36 credits in biology, chemistry, geology, or physics.
- 3. Demonstrate the ability to pursue graduate study successfully by having a master's Grade Point Average of 3.0 or better.
- 4. Satisfy the content requirements for New York State initial certification.
- 5. Submit scores on the NYS Content Specialty Test (CST.)
- 6. Submit two (2) letters of recommendation and a 500-word essay on career goals.
- 7. Participate in an interview.
- 8. Meet additional Departmental, divisional, and New York State requirements, if any.
- 9. If conditionally admitted, make up requirements starting in the first semester and finishing in no more than three consecutive semesters.
- 10. Submit scores of the Graduate Record Examination (GRE) revised general test, i.e., verbal reasoning, quantitative reasoning, and analytical writing.

Curriculum

The 24-credit certificate curriculum consists of two instructional areas:

I. Core Education Sequence (<u>15</u> credits):

ESC 501	Psychological Foundations of Education	3
ESC 502	Historical Foundations of Education: A Multicultural Perspective	3
ESC 529	Language and Literacies Acquisition in Seconday Education	3
ESC 596	Student Teaching in the Middle and High School Grades	3
	and	
ESC 612	Seminar in Secondary Student Teaching	3

II. Methods, Curriculum, and Instruction (9 credits):

ESC 519	Teaching Science in Middle and High School	3
ESC 506	Special Needs Education in TESOL and Secondary Settings	3

And 3 additional credits to be selected in consultation with the Program Coordinator from the following courses:

ESC 767 The Museum as a Resource for Teaching Science3ESC 707 Methods of Teaching Science in Secondary Schools: Selected Topics3ESC 767: Or equivalent3

4. Rationale:

Due to the extra preparation and mentorship that is needed for the edTPA, all science education students in the advanced certification sequence will be required to take ESC 596 - Student Teaching in Middle and High School Grades (3 credits) and ESC 612 - Seminar in Secondary Student Teaching (3 credits) instead of ESC 595 - Internship in Student Teaching and ESC 611 - Teaching Internship Seminar in Secondary Education (1 credit). This curriculum change will allow students to have additional contact time and support from the instructor.

5. Date of departmental approval: 11/9/2017

LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF MUSIC, MULTIMEDIA, THEATRE AND DANCE

CURRICULUM CHANGE

1. Type of Change: Description; Credits; Hours

2. <u>From</u>:

Department(s)	Music, Multimedia, Theatre, and Dance
Career	[] Undergraduate [X] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Performance
Course Prefix & Number	MSP760
Course Title	Piano for Music Teachers
Description	Continued development and practice of skills in keyboard harmony, transposition, playing by ear, sight-reading for music teachers who design and implement performance programming in schools. (Students may repeat this course to continue study up to 3 additional credits.)
Pre/ Co Requisites	Departmental Permission
Credits	2
Hours	2
Liberal Arts	[] Yes [X] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X Not Applicable Required Image: English Composition Image: Mathematics Image: Science Image: Science Image: Flexible Image: World Cultures Image: US Experience in its Diversity Image: Creative Expression Image: Individual and Society Image: Scientific World

3. <u>10</u> :	
Department(s)	Music, Multimedia, Theatre, and Dance
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Performance
Course Prefix	MSP760
& Number	
Course Title	Piano for Music Teachers
Description	<u>Development and practice of skills in keyboard harmony, transposition, playing by ear, sight-reading, and technique</u> for music <u>educators</u> who
	design and implement performance programming in schools. (Students may repeat this course to continue study up to 3 additional credits.)
Pre/ Co	Departmental permission
Requisites	
Credits	3
Hours	3
Liberal Arts	[] Yes [X] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. **To:**

4. **Rationale:** MSP760 (Piano for Music Teachers) is created for teachers of music who are non-pianists. This course develops practical skills in preparation for both classroom (K-12) and studio teaching. Each class consists of group work with the instructor focusing on skills required for the music classroom. The additional credit hour provides the opportunity for individual help while also assisting students in fulfilling their 3 credit elective requirement.

5. Date of departmental approval: 01/25/18

Senate Meeting – March 7, 2018

Undergraduate Curriculum Committee (UCC) Report

The following proposals were approved unanimously by the UCC, with a quorum present on February 14, 2018 (6 of 10 members in attendance):

1. Biological Sciences

- Change pre-req BIO 227
- Change pre-req BIO 228
- Change pre-req BIO 238
- Change pre-req, desc BIO 270
- Change pre-req BIO 271
- Change pre-req BIO 302
- Change pre-req BIO 303
- Change pre-req BIO 311
- Change pre-req BIO 312
- Change pre-req BIO 320
- Change pre-req BIO 321
- Change pre-req BIO 330
- Change pre-req BIO 331
- Change pre-req BIO 336
- Change pre-req BIO 337
- Change pre-req BIO 338
- Change pre-req BIO 339
- Change pre-req BIO 340
- Change pre-req BIO 341
- Change pre-req BIO 350
- Change pre-req BIO 401
- Change pre-req BIO 404
- Change pre-req BIO 406
- Change pre-req BIO 410
- Change pre-req BIO 415
- Change pre-req BIO 420
- Change pre-req BIO 425
- Change pre-req BIO 426
- Change pre-req BIO 431
- Change pre-req BIO 432
- Change pre-req BIO 433
- Change pre-req BIO 435
- Change pre-req BIO 435
 Change pre-req BIO 436
- Change pre-req BIO 430
 Change pre-req BIO 440
- Change pre-req BIO 440
 Change pre-req BIO 462
- Change pre-req BIO 465
- Change pre-req, desc BIO 333
- Change pre-req, desc BIO 400
- Withdraw BIO 266, 310, 335, 424, 470, 424
- 2. Health Sciences
 - Change degree desc BS Dietetics
 - New course DFN 440

- Change degree BS Dietetics
- 3. Languages and Literatures
 - Change course repeat SPA 352
 - New minor classical Greek
 - New minor French
 - New minor Irish
 - New minor Italian
 - New minor Japanese
 - New minor Latin
 - New minor Spanish
- 4. Middle & High School Education
 - Change degree admissions
- 5. Music, Multimedia, Theatre & Dance
 - New course MSP 186
 - Change title MSP 185
- 6. Sociology
 - New minor data
- 7. Social Work
 - Change minor aging

Informational Item:

- 1. Experimental Course MSP 235
- 2. Major/Minor Policies Subcommittee

Next meeting: March 28, 2018, 1 p.m., SC 1405A

LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

2. <u>110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	Bio 227
& Number	
Course Title	Mammalian Histology
Description	Microscopic study of cells, tissues, and organs from prepared slides- with emphasis on the correlation between structure and function. Recent advances grounded in electron microscopy and histochemistry are discussed.
Pre/ Co	NA
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V. Net Applicable
General Education	X_Not Applicable
Component	Required English Composition
Component	Mathematics
	Science
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

3. <u>To</u>:

3. <u>10</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 227
& Number	
Course Title	Mammalian Histology
Description	Microscopic study of cells, tissues, and organs from prepared slides- with emphasis on the correlation between structure and function. Recent advances grounded in electron microscopy and histochemistry are discussed.
Pre/ Co	Bio 166 and Bio 167
Requisites	
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NĂ
General Education Component	X_Not Applicable Required English Composition Mathematics Science
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

5. Date of departmental approval: October 18, 2017

LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 228
& Number	
Course Title	Mammalian Physiology
Description	Study of the basic principles of mammalian physiology. Various organ systems will be presented to illustrate their mechanisms of operation, their nervous and hormonal control, and their interrelationships with other organ systems in maintaining homeostasis. Emphasis will be given to the cardiovascular, neuromuscular, renal, and respiratory systems.
Pre/ Co	CHE 168 and CHE 169
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_Not Applicable Required English Composition Mathematics Science
	Flexible World Cultures US Experience in its Diversity Creative Expression

Individual and Society Scientific World	

3. <u>To</u>:

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 228
& Number	
Course Title	Mammalian Physiology
Description	Study of the basic principles of mammalian physiology. Various organ systems will be presented to illustrate their mechanisms of operation, their nervous and hormonal control, and their interrelationships with other organ systems in maintaining homeostasis. Emphasis will be given to the cardiovascular, neuromuscular, renal, and respiratory systems.
Pre/ Co	BIO 166 and BIO 167 and CHE 168 and CHE 169
Requisites	
Credits	4
Hours	6 <u>(2 lecture; 4 lab)</u>
Liberal Arts	[X]Yes []No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

5. Date of departmental approval: October 18, 2017

LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: pre or corequisite

2. <u>From</u>:

<u> 2. 110m</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 238
& Number	
Course Title	Genetics
Description	Basic principles of genetics and modern developments in the field, with their theoretical and practical implications: the inheritance, structure, and mode of action of the genetic material in microorganisms, plants and animals, including man. Laboratory work consists of preparation and examination of chromosome material and experiments with segregating characters in a variety of organisms.
Pre/ Co	NA
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_Not Applicable Required English Composition Mathematics
	Science Flexible World Cultures US Experience in its Diversity Creative Expression

Page 6

Individual and Society Cientific World

3. <u>To</u>:

3. <u>Io</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 238
& Number	
Course Title	Genetics
Description	Basic principles of genetics and modern developments in the field, with their theoretical and practical implications: the inheritance, structure, and mode of action of the genetic material in microorganisms, plants and animals, including man. Laboratory work consists of preparation and examination of chromosome material and experiments with segregating characters in a variety of organisms.
Pre/ Co Requisites	BIO 166 and BIO 167
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program)</u>: Prerequisites are revised to better guide students in

choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

5. Date of departmental approval: October 18, 2017

LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

<u>2. 110m</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 270
& Number	
Course Title	Invertebrate Zoology
Description	Anatomy and natural history of invertebrates. Evolutionary relationships and functional problems presented by the environment and the mechanisms by which they are solved.
Pre/ Co	NA
Requisites	
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u>:

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 270
& Number	
Course Title	Invertebrate Zoology
Description	Anatomy and natural history of invertebrates. Evolutionary relationships and functional problems presented by the <u>environment</u> and the mechanisms by which they are solved.
Pre/ Co	BIO 166 and BIO 167
Requisites	
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 271
& Number	
Course Title	Invertebrate Zoology Laboratory
Description	Techniques used in the study of invertebrates
Pre/ Co	NA
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society Scientific World

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 271
Course Title	Invertebrate
Description	Techniques used in the study of invertebrates.
Pre/ Co	PREREQ: BIO 166 and BIO 167
Requisites	PRE OR COREQ: BIO 270
Credits	2
Hours	4 <u>(lab)</u>
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: pre or corequisite

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 302
& Number	
Course Title	Biogeography
Description	Analysis of origin, distribution, adaptation, and association of plants and animals. Development of living communities considered particularly in space but also in time. Stress placed on broad distributional relationships.
Pre/ Co	GEP 226
Requisites	
Credits	4
Hours	5
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V. Nat Applicable
General Education	X_ Not Applicable
Component	Required English Composition
Component	Mathematics
	Science
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

3. **To:**

ა. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 302
& Number	
Course Title	Biogeography
Description	Analysis of origin, distribution, adaptation, and association of plants and animals. Development of living communities considered particularly in space but also in time. Stress placed on broad distributional relationships.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	4
Hours	5 (3 lecture; 2 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	· · · · · ·
	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 303
& Number	
Course Title	Molecular Genetics
Description	Gene structure, organization, and expression. Experimental methods
	used for studying genes and their products.
Pre/ Co	One 200-level BIO course
Requisites	
Credits	4
Hours	5
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World
l	

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 303
& Number	
Course Title	Molecular Genetics
Description	Gene structure, organization, and expression. Experimental methods used for studying genes and their products.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	4
Hours	5 (3 lecture; 2 lab)
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 311
& Number	
Course Title	Parasitology
Description	The study of parasitic organisms, their life cycles, the diseases they
Description	cause, and the treatments of these diseases in humans.
Pre/ Co	One 200-level Biology Course
Requisites	
Credits	3
	3
Hours	
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V. Nat Appliaghla
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 311
& Number	
Course Title	Parasitology
Description	The study of parasitic organisms, their life cycles, the diseases they cause, and the treatments of these diseases in humans.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 312
& Number	
Course Title	Parasitology Laboratory
Description	Microscopic identification of life cycle stages of parasites. Diagnostic testing of animal parasites covered in BIO 311.
Pre/ Co	BIO 311
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	Bio 312
& Number	
Course Title	Parasitology Laboratory
Description	Microscopic identification of life cycle stages of parasites. Diagnostic testing of animal parasites covered in BIO 311.
Pre/ Co	PREREQ BIO 166 and BIO 167
Requisites	PRE OR COREQ: BIO 311
Credits	2
Hours	4 <u>(lab)</u>
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 320
& Number	
Course Title	Neural Development: From Genes and Cells to Brains
Description	Embryonic development of the nervous system of vertebrates and selected invertebrates. Emphasis on the processes of neurulation, neurogenesis, and axon growth.
Pre/ Co	One 200-level BIO course (BIO 228, BIO 266, BIO 267, or BIO 268
Requisites	recommended)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Flexible
	World Cultures
	US Experience in its Diversity Creative Expression
	Individual and Society Scientific World
	<u> </u>

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 320
& Number	
Course Title	Neural Development: From Genes and Cells to Brains
Description	Embryonic development of the nervous system of vertebrates and
	selected invertebrates. Emphasis on the processes of neurulation, neurogenesis, and axon growth.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	
	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	Dialagy
Subject Area	Biology
Course Prefix	BIO 321
& Number	
Course Title	Neural Development Laboratory
Description	Molecular and cellular techniques used in the study of the embryonic
- / -	development of the nervous system.
Pre/ Co	NA
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
	BIO 321
& Number	
	Neural Development Laboratory
	Molecular and cellular techniques used in the study of the embryonic
	development of the nervous system.
	PREREQ: BIO 166 and BIO 167
	COREQ: BIO 320
	2
	4 <u>(lab)</u>
	[X] Yes [] No
	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

<u> </u>	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 330
& Number	
Course Title	Plant Physiology
Description	Consideration of the major physiological processes of plants, with special emphasis on water relations, inorganic nutrition, photosynthesis, metabolism, and hormonal relationships. Laboratory studies consist of physiological experiments with living plants.
Pre/ Co	CHE 234 and CHE 235
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

3. <u>To</u>:

3. <u>10</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 330
& Number	
Course Title	Plant Physiology
Description	Consideration of the major physiological processes of plants, with
	special emphasis on water relations, inorganic nutrition,
	photosynthesis, metabolism, and hormonal relationships. Laboratory
	studies consist of physiological experiments with living plants.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230) and CHE 234 and CHE 235
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc) General	V. Nat Applicable
Education	X_ Not Applicable
Component	Required English Composition
Component	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>From</u>:

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix &	BIO 331
Number	
Course Title	Experimental Microbiology
Description	Consideration of major groups of microorganisms with emphasis on metabolic activities, chemical composition, ultrastructure, genetics, ecology, and phylogenetic relationships. Basic and advanced microbiological techniques.
Pre/ Co	CHE 168 and CHE 169
Requisites	
Credits	4
Hours	6
Liberal Arts	[X]Yes []No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	

General	X Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u>:

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix &	BIO 331
Number	
Course Title	Experimental Microbiology
Description	Consideration of major groups of microorganisms with emphasis on metabolic activities, chemical composition, ultrastructure, genetics, ecology, and phylogenetic relationships. Basic and advanced microbiological techniques
Pre/ Co	BIO 166 and BIO 167 and CHE 168 and CHE 169
Requisites	
Credits	4
Hours	6 <u>(2 lecture; 4 lab)</u>
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	

General	X Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 336
& Number	
Course Title	Marina Pialagy Lasturas
	Marine Biology Lectures
Description	Current concepts in estuarine, marine and littoral ecology, including how organisms deal with the unique physical and chemical characteristics imposed by these environments.
Pre/ Co	One 200-level BIO course (BIO 238, BIO 268, BIO 266, or BIO 267
Requisites	recommended)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 336
& Number	
Course Title	Marine Biology Lectures
Description	Current concepts in estuarine, marine and littoral ecology, including how organisms deal with the unique physical and chemical characteristics imposed by these environments.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

<u>2. 110m</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 337
& Number	
Course Title	Marine Biology Laboratory
Description	Laboratory and field work stressing techniques useful in basic
	environmental analysis, community analysis, and population
	dynamics of marine and estuarine organisms.
Pre/ Co	Marine Biology (Lectures), BIO 336
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World
	i

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 337
& Number	
Course Title	Marine Biology Laboratory
Description	Laboratory and field work stressing techniques useful in basic
	environmental analysis, community analysis, and population
	dynamics of marine and estuarine organisms.
Pre/ Co	PREREQ: BIO 166 and BIO 167
Requisites Credits	PRE OR COREQ: BIO 336 2
Hours	2 4 (lab)
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

<u>Z. 110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 338
& Number	
Course Title	Genetics of Man
Description	Principles of human genetics and their significance in the health sciences. The relationship between genetics and human diseases. Lecture topics include: chromosomal and genetic abnormalities in humans, metabolic variation and disease, patterns of human heredity, immunogenetics, population genetics, genetic counseling. Laboratory work includes karyotype analysis, study of biochemical and morphologic variation, probability and statistical testing, immunogenetics. Open to biology majors only.
Pre/ Co	BIO 238
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_Not Applicable Required English Composition Mathematics Science Flexible World Cultures

3. <u>To</u>:

3. <u>10</u> :		
Department(s)	Biological Sciences	
Career	[X] Undergraduate [] Graduate	
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial	
Level		
Subject Area	Biology	
Course Prefix	BIO 338	
& Number		
Course Title	Genetics of Man	
Description	Principles of human genetics and their significance in the health sciences. The relationship between genetics and human diseases. Lecture topics include: chromosomal and genetic abnormalities in humans, metabolic variation and disease, patterns of human heredity, immunogenetics, population genetics, genetic counseling. Laboratory work includes karyotype analysis, study of biochemical and morphologic variation, probability and statistical testing, immunogenetics. Open to biology majors only.	
Pre/ Co	BIO 166 and BIO 167 and BIO 238	
Requisites		
Credits	4	
Hours	6 (2 lecture; 4 lab)	
Liberal Arts	[X] Yes [] No	
Course Attribute (e.g. Writing Intensive, WAC, etc)	NĂ	
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World	

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>110m</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 339
& Number	
Course Title	Ecology
Description	Introduction to the factors comprising biotic communities, with special emphasis on the properties of populations and communities. Laboratory and fieldwork stress techniques useful in basic environmental and community analyses.
Pre/ Co Requisites	One 200-level BIO course (BIO 242 or BIO 266 recommended)
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science FlexibleVorld CulturesUS Experience in its DiversityCreative ExpressionIndividual and SocietyScientific World

3. <u>To</u>:

3. <u>10</u> .		
Department(s)	Biological Sciences	
Career	[X] Undergraduate [] Graduate	
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial	
Level		
Subject Area	Biology	
Course Prefix	BIO 339	
& Number		
Course Title	Ecology	
Description	Introduction to the factors comprising biotic communities, with special	
	emphasis on the properties of populations and communities.	
	Laboratory and fieldwork stress techniques useful in basic	
	environmental and community analyses.	
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above	
Requisites	(NOT BIO 230)	
Credits	4	
Hours	6 <u>(2 lecture; 4 lab)</u>	
Liberal Arts	[X] Yes [] No	
Course	NA	
Attribute (e.g.		
Writing		
Intensive,		
WAC, etc)		
General	X_Not Applicable	
Education	Required	
Component	English Composition	
	Mathematics	
	Science	
	Flexible	
	World Cultures	
	US Experience in its Diversity	
	Creative Expression	
	Individual and Society	
	Scientific World	
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4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Doportmont(c)	Riological Sciences	
Department(s)	Biological Sciences	
Career	[X] Undergraduate [] Graduate	
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial	
Level		
Subject Area	Biology	
Course Prefix	BIO 340	
& Number		
Course Title	Human Body and Brain	
Description	Human anatomy and physiology with emphasis on the brain's role in	
	regulating body functions.	
Pre/ Co	BIO 166 and BIO 167	
Requisites		
Credits	3	
Hours	3	
Liberal Arts	[X] Yes [] No	
Course	NA	
Attribute (e.g.		
Writing		
Intensive,		
WAC, etc)		
General	X_ Not Applicable	
Education	Required	
Component	English Composition	
	Mathematics	
	Science	
	Flexible	
	World Cultures	
	US Experience in its Diversity	
	Creative Expression	
	Individual and Society	
	Scientific World	

3. <u>To:</u>	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 340
& Number	
Course Title	Human Body and Brain
Description	Human anatomy and physiology with emphasis on the brain's role in regulating body functions.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flovible
	Flexible World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences	
Career	[X] Undergraduate [] Graduate	
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial	
Subject Area	Biology	
Course Prefix & Number	BIO 341	
Course Title	Human Body and Brain Laboratory	
Description	Laboratory focused on anatomical structures of the body organs and the brain.	
Pre/ Co Requisites	BIO 340	
Credits	2	
Hours	4	
Liberal Arts	[X] Yes [] No	
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA	
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World 	

3. <u>To</u> :		
Department(s)	Biological Sciences	
Career	[X] Undergraduate [] Graduate	
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial	
Level		
Subject Area	Biology	
Course Prefix	BIO 341	
& Number		
Course Title	Human Body and Brain Laboratory	
Description	Laboratory focused on anatomical structures of the body organs and the brain.	
Pre/ Co	PREREQ: BIO 166 and BIO 167	
Requisites	COREQ: BIO 340	
Credits	2	
Hours	4 <u>(lab)</u>	
Liberal Arts	[X] Yes [] No	
Course	NA	
Attribute (e.g.		
Writing		
Intensive,		
WAC, etc) General	X_ Not Applicable	
Education		
Component	English Composition	
Component	Mathematics	
	Science	
	Flexible	
	World Cultures	
	US Experience in its Diversity	
	Creative Expression	
	Individual and Society	
	Scientific World	

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 350
& Number	
Course Title	Introduction to Immunology
Description	This course will focus on the comprehension, application, and synthesis of important immunology concepts. This course is an introductory course that which will examine both normal and disease states of the immune system. The course will use current and traditional research techniques in the lab to emphasize what is learned in the lecture.
Pre/ Co	NA
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
I	

Creative Expression Individual and Society Scientific World

3. <u>To:</u>

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 350
& Number	
Course Title	Introduction to Immunology
Description	This course will focus on the comprehension, application, and synthesis of important immunology concepts. This course is an introductory course that which will examine both normal and disease states of the immune system. The course will use current and traditional research techniques in the lab to emphasize what is learned in the lecture.
Pre/ Co	BIO 166 and BIO 167 and BIO 238
Requisites	
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive, WAC, etc)	
General	X_ Not Applicable
Education	
Component	English Composition
Component	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

2. <u>110m</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 401
& Number	
Course Title	Biological Systematics
Description	A study of the theoretical basis and methodologies of each of the current schools of systematics, and the arguments used by each school in uncovering the phylogenetic relationships among organisms. Topics to be covered will include Aristotelian essentialism, evolutionary systematics, phenetics, cladistics (phylogenetic systematics), transformed (pattern) cladistics, monophyly, paraphyly, polyphyly, parsimony, homology, homoplasy, character state analysis, and polarity.
Pre/ Co	Two additional BIO courses
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_Not Applicable Required English Composition Mathematics Science Flexible

World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

<u> </u>	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 401
& Number	
Course Title	Biological Systematics
Description	A study of the theoretical basis and methodologies of each of the current schools of systematics, and the arguments used by each school in uncovering the phylogenetic relationships among organisms. Topics to be covered will include Aristotelian essentialism, evolutionary systematics, phenetics, cladistics (phylogenetic systematics), transformed (pattern) cladistics, monophyly, paraphyly, polyphyly, parsimony, homology, homoplasy, character state analysis, and polarity.
Pre/ Co	BIO 166 and BIO 167 and two BIO course at 200 level or above
Requisites	(NOT BIO 230)
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NĂ
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science FlexibleVorld CulturesUS Experience in its DiversityCreative Expression
	Individual and Society

____ Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 404
& Number	
Course Title	Plant Biochemistry
Description	Biochemical activities of plants, including photosynthesis, respiratory pathways, sulfate and nitrate reduction, and cell-wall metabolism will be discussed. The biosynthesis by plants of drugs of pharmacological significance such as alkaloids and vitamins will also be considered. Laboratory work will include techniques for fractionating plant cells and isolating intermediates and products' metabolic pathways
Pre/ Co	Two additional BIO courses and CHE 234 and CHE 235.
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_Not Applicable Required English Composition Mathematics Science Flexible World Cultures

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 404
& Number	
Course Title	Plant Biochemistry
Description	Biochemical activities of plants, including photosynthesis, respiratory pathways, sulfate and nitrate reduction, and cell-wall metabolism will be discussed. The biosynthesis by plants of drugs of pharmacological significance such as alkaloids and vitamins will also be considered. Laboratory work will include techniques for fractionating plant cells and isolating intermediates and products' metabolic pathways
Pre/ Co	BIO 166 and BIO 167 and two BIO course at 200 level or above
Requisites	(NOT BIO 230) and CHE 234 and CHE 235
Credits	4
Hours	6 <u>(2 lecture; 4 lab)</u>
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: pre or corequisite

2. From:

Career [X] Undergraduate [] Graduate Academic [X] Regular [] Compensatory [] Developmental [] Remedial Level Biology Subject Area Biology Course Prefix BIO 406 & Number Biochemistry of Differentiation Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and CHE 234 and CHE 235 Requisites 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. NA Writing Intensive, Writing	<u> 2. 110111.</u>	
Academic Level [X] Regular [] Compensatory [] Developmental [] Remedial Subject Area Biology Course Prefix BIO 406 & Number Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and-CHE 234 and CHE 235 Requisites Credits Course NA Attribute (e.g. NA Writing Intensive, WAC, etc) NA General X_ Not Applicable Education English Composition	Department(s)	Biological Sciences
Level Biology Subject Area Biology Course Prefix BIO 406 & Number Biochemistry of Differentiation Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and-CHE 234 and CHE 235 Requisites Image: Course other BIO course, and-CHE 234 and CHE 235 Credits 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. NA Writing Intensive, WAC, etc)	Career	[X] Undergraduate [] Graduate
Subject Area Biology Course Prefix BIO 406 & Number Biochemistry of Differentiation Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and-CHE 234 and CHE 235 Requisites 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g.	Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Course Prefix BIO 406 & Number Biochemistry of Differentiation Course Title Biochemistry of Differentiation Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and-CHE 234 and CHE 235 Credits 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. WA Writing	Level	
& Number Biochemistry of Differentiation Course Title Biochemistry of Differentiation Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and CHE 234 and CHE 235 Requisites General Liberal Arts [X] Yes [] No Course NA Attribute (e.g., WAC, etc)	Subject Area	Biology
Course Title Biochemistry of Differentiation Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and CHE 234 and CHE 235 Requisites 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g., WAC, etc)	Course Prefix	BIO 406
Description The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and CHE 234 and CHE 235 Requisites 3 Liberal Arts [X] Yes [X] Yes] No Course NA Attribute (e.g. WAC, etc) X_ Not Applicable Education K Required Component K Science	& Number	
pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. Pre/ Co BIO 238, one other BIO course, and CHE 234 and CHE 235 Requisites 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. WA Writing	Course Title	
Requisites 3 Credits 3 Hours 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. NA Writing NA Mathematics	Description	pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific
Credits 3 Hours 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. NA Writing Intensive, WAC, etc)	Pre/ Co	BIO 238, one other BIO course, and CHE 234 and CHE 235
Hours 3 Liberal Arts [X] Yes [] No Course NA Attribute (e.g. NA Writing Intensive, WAC, etc)	Requisites	
Liberal Arts [X] Yes [] No Course NA Attribute (e.g. Writing Intensive, WAC, etc) GeneralX_ Not Applicable EducationRequired ComponentEnglish Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	Credits	3
Course NA Attribute (e.g. Writing Intensive, WAC, etc) GeneralX_ Not Applicable Education Required ComponentEnglish Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	Hours	3
Attribute (e.g. Writing Intensive, WAC, etc) GeneralX_Not Applicable EducationRequired ComponentEnglish Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	Liberal Arts	[X] Yes [] No
Writing Intensive, WAC, etc) GeneralX_Not Applicable EducationRequired ComponentEnglish Composition Mathematics Science Science Flexible World Cultures US Experience in its Diversity		NA
Intensive, WAC, etc) GeneralX_Not Applicable EducationRequired ComponentEnglish Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	(U	
WAC, etc) General X_ Not Applicable Education English Composition Component Mathematics Science Flexible World Cultures US Experience in its Diversity	•	
GeneralX_Not Applicable EducationRequired ComponentEnglish Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	,	
Education Required Component English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	General	X Not Applicable
Component English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity	Education	
Science Science Flexible World Cultures US Experience in its Diversity	Component	
Flexible World Cultures US Experience in its Diversity		
World Cultures US Experience in its Diversity		Science
World Cultures US Experience in its Diversity		Eloviblo
US Experience in its Diversity		
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Individual and Society Scientific World	
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3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix	BIO 406
& Number	
Course Title	Biochemistry of Differentiation
Description	The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	(NOT BIO 230) and BIO 238 and CHE 234 and CHE 235
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science FlexibleVorld CulturesUS Experience in its DiversityCreative ExpressionIndividual and SocietyScientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in

choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>From</u>:

<u> </u>	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 410
& Number	
Course Title	Cell Physiology and Biochemistry
Description	Consideration of structure in relation to function in the intact cell system. Metabolic regulation and the properties of cell membranes, the cytoplasm, the nucleus, and the genes are discussed in terms of some of the integrated activities of the living cell, including permeability, active transport, excitation, conduction, contraction, differentiation, and aging.
Pre/ Co	Either two additional BIO courses or one BIO course plus one
Requisites	semester of physical chemistry, and CHE 234 and CHE 235-
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_Not Applicable
Education	
Component	English Composition
	Mathematics Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression

Individual and Society Scientific World	
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3. <u>Io</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 410
& Number	
Course Title	Cell Physiology and Biochemistry
Description	Consideration of structure in relation to function in the intact cell system. Metabolic regulation and the properties of cell membranes, the cytoplasm, the nucleus, and the genes are discussed in terms of some of the integrated activities of the living cell, including permeability, active transport, excitation, conduction, contraction, differentiation, and aging.
Pre/ Co	BIO 166 and BIO 167 and two BIO course at 200 level or above
Requisites	(NOT BIO 230) and CHE 234 and CHE 235
Credits	4
Hours	6 <u>(2 lecture; 4 lab)</u>
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program)</u>: Prerequisites are revised to better guide students in

choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 415
& Number	
Course Title	Medical Microbiology
Description	The course will focus on disease mechanism, antibiotic and antiviral susceptibility and resistance, and epidemiology of primarily human diseases caused by bacteria, viruses and fungi as well as by those caused by emerging diseases
Pre/ Co	BIO 331
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

ა. <u>IU</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 415
& Number	
Course Title	Medical Microbiology
Description	The course will focus on disease mechanism, antibiotic and antiviral susceptibility and resistance, and epidemiology of primarily human
	diseases caused by bacteria, viruses and fungi as well as by those
	caused by emerging diseases
Pre/ Co	BIO 166, and BIO 167, and BIO 331 or BIO 350
Requisites	
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>From</u>:

Biological Sciences
[X] Undergraduate [] Graduate
[X] Regular [] Compensatory [] Developmental [] Remedial
Biology
BIO 420
Molecular Biology
Discussion of structure and function of nucleic acids and proteins and their synthesis in vivo and in vitro. Basic concepts in molecular genetics are studied, with special emphasis on the molecular architecture of the gene, its action, and regulations in bacteria and bacteriophages. Laboratory experiments include techniques for isolation and quantitation of nucleic acids from cells, use of the cell- free synthesizing systems, and basic procedures in microbial genetics.
CHE 234, CHE 235, BIO 238, and either BIO 400 or CHE 444.
4
6
[X] Yes [] No
NA
X_Not Applicable
Required
English Composition Mathematics
Science
Flexible

World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World	
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<u> </u>	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 420
& Number	
Course Title	Molecular Biology
Description	Discussion of structure and function of nucleic acids and proteins and their synthesis in vivo and in vitro. Basic concepts in molecular genetics are studied, with special emphasis on the molecular architecture of the gene, its action, and regulations in bacteria and bacteriophages. Laboratory experiments include techniques for isolation and quantitation of nucleic acids from cells, use of the cell- free synthesizing systems, and basic procedures in microbial genetics.
Pre/ Co	BIO 166 and BIO 167 and BIO 238 and CHE 234, and CHE 235, and
Requisites	either BIO 400 or CHE 444
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_Not Applicable Required English Composition Mathematics Science Science Flexible World Cultures US Experience in its Diversity
	Creative Expression Individual and Society

____ Scientific World

4. Rationale (Explain how this change will impact the learning outcomes of the <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

Doportmont(a)	Pielogical Sciences
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 425
& Number	
Course Title	Ichthyology
Description	Life histories of fishes including a study of the mathematical and statistical methods for the treatment and evaluation of data relevant to the field of fisheries science.
Pre/ Co	Two Biology courses at the 200 level or above.
Requisites	
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 425
& Number	
Course Title	Ichthyology
Description	Life histories of fishes including a study of the mathematical and statistical methods for the treatment and evaluation of data relevant to the field of fisheries science.
Pre/ Co	BIO 166 and BIO 167 and two BIO courses at 200 level or above
Requisites	(NOT BIO 230)
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

2. <u>110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 426
& Number	
Course Title	Ichthyology Laboratory
Description	Laboratory and field work stressing techniques useful in basic fish anatomy, community analysis, population dynamics, and statistical modeling of data relevant to fisheries science.
Pre/ Co	BIO 425
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 426
& Number	
Course Title	Ichthyology Laboratory
Description	Laboratory and field work stressing techniques useful in basic fish
	anatomy, community analysis, population dynamics, and statistical modeling of data relevant to fisheries science.
Pre/ Co	PREREQ: BIO 166 and BIO 167
Requisites	PRE OR COREQ: BIO 425
Credits	2
Hours	4 (lab)
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

2. 110 .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 431
& Number	
Course Title	Comparative Animal Physiology
Description	Comparative aspects of cellular and organ physiology, the evolutionary basis for development of homeostatic mechanisms, and structure-function correlation within the animal kingdom. Laboratory work includes the use of modern techniques to elucidate and illustrate the principles discussed in the lectures.
Pre/ Co	Two BIO courses at 200 level or above, and, CHE 234 and CHE 235.
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression

Individual and Society Scientific World	
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3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 431
Course Title	Comparative Animal Physiology
Description	Comparative aspects of cellular and organ physiology, the evolutionary basis for development of homeostatic mechanisms, and structure-function correlation within the animal kingdom. Laboratory work includes the use of modern techniques to elucidate and illustrate the principles discussed in the lectures.
Pre/ Co	BIO 166 and BIO 167 and two BIO course at 200 level or above
Requisites	(NOT BIO 230) and CHE 234 and CHE 235
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science FlexibleVorld CulturesUS Experience in its DiversityCreative ExpressionIndividual and SocietyScientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program)</u>: Prerequisites are revised to better guide students in

choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>From</u>:

<u>Z.</u> <u>110</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 432
& Number	
Course Title	Biological Fine Structure
Description	Detailed description of cell structure at the macromolecular level as revealed by modern methods of fine-structure analysis, especially by electron microscopy. Emphasis on structure-function relationships in cell components. Demonstration of the various methods used in fine- structure analysis.
Pre/ Co	Two additional BIO courses.
Requisites	Corequisite BIO 433.
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
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	Page 70

	Creative Expression Individual and Society Scientific World
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3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	Dialamu
Subject Area	Biology
Course Prefix	BIO 432
& Number	Diele sieel Fine Otwesture
Course Title	Biological Fine Structure
Description	Detailed description of cell structure at the macromolecular level as revealed by modern methods of fine-structure analysis, especially by electron microscopy. Emphasis on structure-function relationships in cell components. Demonstration of the various methods used in fine- structure analysis.
Pre/ Co	BIO 166 and BIO 167 and two BIO course at 200 level or above
Requisites	(NOT BIO 230)
	Corequisite BIO 433
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

Z. <u>110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 433
& Number	
Course Title	Techniques in Electron Microscopy
Description	Fundamental training in techniques used in obtaining structural cellular information at the macromolecular level. Emphasis is on methods and applications of electron microscopy to the study of biological materials.
Pre/ Co	Two additional BIO courses.
Requisites	COREQ: BIO 432.
Credits	3
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V. Nat Applicable
General Education	X_ Not Applicable
Component	Required English Composition
Component	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
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Individual and Society Scientific World	

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 433
Course Title	Techniques in Electron Microscopy
Description	Fundamental training in techniques used in obtaining structural cellular information at the macromolecular level. Emphasis is on methods and applications of electron microscopy to the study of biological materials.
Pre/ Co Requisites	PREREQ: BIO 166 and BIO 167 and two BIO course at 200 level or above (NOT BIO 230) COREQ: BIO 432.
Credits	3
Hours	6 <u>(lab)</u>
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program)</u>: Prerequisites are revised to better guide students in

choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

<u>Z. 110111</u> .		
Department(s)	Biological Sciences	
Career	[X] Undergraduate [] Graduate	
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial	
Level		
Subject Area	Biology	
Course Prefix	BIO 435	
& Number		
Course Title	Neurophysiology	
Description	A general consideration of nervous systems, excitable membrane physiology, synapses, sensory receptors, trophic function, regeneration of nervous tissue, and behavior.	
Pre/ Co Requisites	Two additional BIO courses, including at least one course in animal physiology, and CHE 234 and CHE 235. Corequisite BIO 436.	
Credits	3	
Hours	3	
Liberal Arts	[X] Yes [] No	
Course	NA	
Attribute (e.g.		
Writing		
Intensive,		
WAC, etc)	V. Net Applicable	
General Education	X_Not Applicable Required	
Component	English Composition	
Component	Mathematics	
	Science	
	Flexible	
	World Cultures	
	US Experience in its Diversity	
	Page 76	

Creative Expression Individual and Society Scientific World

3. <u>10</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 435
Course Title	Neurophysiology
Description	A general consideration of nervous systems, excitable membrane physiology, synapses, sensory receptors, trophic function, regeneration of nervous tissue, and behavior.
Pre/ Co	BIO 166 and BIO 167 and BIO 228 and one BIO course at 200 level
Requisites	or above (NOT BIO 230) and CHE 234 and CHE 235
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible World Cultures
	<pre> US Experience in its Diversity Creative Expression</pre>
	Individual and Society
	Scientific World
L	

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 436
& Number	
Course Title	Neurophysiology Laboratory
Description	The laboratory will introduce the students to instrumentation and neurophysiological techniques. The experiments will examine bioelectricity, receptor processes, central processes, behavior, and regeneration.
Pre/ Co	BIO 435
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General Education	X Not Applicable
	Required English Composition
Component	Mathematics
	Science
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society

Scientific World	

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 436
& Number	
Course Title	Neurophysiology Laboratory
Description	The laboratory will introduce the students to instrumentation and neurophysiological techniques. The experiments will examine bioelectricity, receptor processes, central processes, behavior, and regeneration.
Pre/ Co	PREREQ: BIO 166 and BIO 167
Requisites	PRE OR COREQ: BIO 435
Credits	2
Hours	4 <u>(lab)</u>
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

<u>2. 110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 440
& Number	
Course Title	Biology Journal Review
Description	Reading, written critical review, student presentations and roundtable discussion of current, primary research papers in biology.
Pre/ Co	BIO 166 and BIO 167 and one additional BIO course.
Requisites	
Credits	2
Hours	2
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 440
& Number	
Course Title	Biology Journal Review
Description	Reading, written critical review, student presentations and roundtable discussion of current, primary research papers in biology.
Pre/ Co	BIO 166 and BIO 167 and one BIO course at 200 level or above
Requisites	<u>(NOT BIO 230)</u> .
Credits	2
Hours	2
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. From:

2. <u>FIOIII</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 462
& Number	
Course Title	Modeling Cellular Networks
Description	The use of mathematical models and computational tools for
	studying the various regulatory networks in the cell.
Pre/ Co	BIO 166 and CMP 232.
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flovible
	Flexible World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 462
& Number	
Course Title	Modeling Cellular Networks
Description	The use of mathematical models and computational tools for
	studying the various regulatory networks in the cell.
Pre/ Co	BIO 166 and BIO 167 and two BIO course at 200 level or above
Requisites	(NOT BIO 230) and CMP 232
Credits	4
Hours	6 <u>(2 lecture; 4 lab)</u>
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition Mathematics
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: pre or corequisite

2. <u>From</u>:

<u> 2. 110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 465
& Number	
Course Title	Microbial Physiology and Genetics
Description	The organization of physiological processes in microorganisms including structure, energy yielding mechanisms, macromolecular biosynthesis, growth, and regulation. The genetics of microorganisms including the organization, maintenance, and expression of genetic information, cell growth and differentiation, and genetic engineering.
Pre/ Co	BIO 331
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression

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Individual and Society Scientific World	
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3. <u>To</u>:

3. <u>Io</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 465
Course Title	Microbial Physiology and Genetics
Description	The organization of physiological processes in microorganisms including structure, energy yielding mechanisms, macromolecular biosynthesis, growth, and regulation. The genetics of microorganisms including the organization, maintenance, and expression of genetic information, cell growth and differentiation, and genetic engineering.
Pre/ Co	BIO 166 and BIO 167 and BIO 331
Requisites	
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program)</u>: Prerequisites are revised to better guide students in

choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: Course description, pre or corequisite

2. From:

<u>Z. 110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 333
& Number	
Course Title	Endocrine Physiology
Description	Endocrine regulation of growth, development, metabolism, and reproduction. Laboratory experiments on endocrine regulation of physiological processes with use of small animals (rats, frogs, and fishes) include experience with surgical techniques and radioisotopes.
Pre/ Co	CHE 234 and CHE 235
Requisites	
Credits	4
Hours	6
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing	NA
Intensive,	
WAC, etc) General Education Component	X_Not Applicable Required English Composition Mathematics Science Flexible Flexible World Cultures US Experience in its Diversity US Experience in its Diversity Creative Expression Individual and Society

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Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 333
& Number	
Course Title	Endocrine Physiology
Description	Endocrinology history and current research. Analysis of interactions between genes and environment affecting chemical communication; ethical issues related to synthetic hormone use and manufactured chemicals.
Pre/ Co Requisites	BIO 166 and BIO 167 and one BIO course at 200 level or above (NOT BIO 230)
Credits	4
Hours	6 (2 lecture; 4 lab)
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge. Additionally, BIO 333 was updated to teach current thinking about endocrinology, so the description was revised to reflect the changes.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course Description and *pre or corequisite*

2. From:

Biological Sciences [X] Undergraduate [] Graduate [X] Regular [] Compensatory [] Developmental [] Remedial Biology BIO 400 Biological Chemistry Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and in cell-free systems
[X] Regular [] Compensatory [] Developmental [] Remedial Biology BIO 400 Biological Chemistry Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
Biology BIO 400 Biological Chemistry Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
BIO 400 Biological Chemistry Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
BIO 400 Biological Chemistry Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
Biological Chemistry Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzymecatalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and
Two BIO courses at 200 level or above, and, CHE 234 and CHE 235
4
6
[X] Yes [] No
NA
<pre>X_Not Applicable Required English Composition Mathematics Science</pre>
1

World Cultures US Experience in its Diversity Creative Expression

3. <u>To</u>:

Biological Sciences [X] Undergraduate [] Graduate [X] Begular [] Componentativ [] Developmental [] Remedial
[X] Pogular [] Componentary [] Developmental [] Demodial
[X] Regular [] Compensatory [] Developmental [] Remedial
Biology
BIO 400
Biological Chemistry
Stress on the central role of nucleic acids and proteins in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and <u>enzyme catalyzed</u> reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. Selected experiments to demonstrate the dynamic aspects of biochemistry in living cells and in cell-free systems
BIO 166 and BIO 167 and two BIO course at 200 level or above
(NOT BIO 230) and CHE 234 and CHE 235
4
6 (2 lecture; 4 lab)
[X] Yes [] No
NA
X_Not Applicable Required English Composition Mathematics Science Flexible Vorld Cultures US Experience in its Diversity Creative Expression Individual and Society

____ Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the</u> <u>department and Major/Program</u>): Prerequisites are revised to better guide students in choosing their coursework on CUNYFirst, and to prevent them from taking courses for which they have insufficient prior knowledge. The spelling error in the course description was corrected.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Withdrawal of courses

2. Description: BIO 266 Invertebrate Zoology

Survey of the anatomy and natural history of the invertebrates. Emphasis is not only on the evolutionary relationships, but also on functional problems presented by the environment and the mechanisms by which they are solved.

3. Rationale (Explain why this course/program is no longer needed in the

Department): A new course covering the same content but with a different number was created to separate the lecture and the lab. BIO 270 and BIO 271 were created to replace BIO 266.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Withdrawal of courses

2. Description: BIO 310 Parasitology

Biology of animal parasites including evolutionary, ecological, and physiological aspects of parasitism. Special reference to problems of life cycles, morphology, taxonomy, and host-parasite relationships. Lab includes techniques of finding, mounting, and identifying parasites.

3. <u>Rationale (Explain why this course/program is no longer needed in the</u> <u>Department</u>): A new course covering the same content but with a different number was created to separate the lecture and the lab. BIO 311 and BIO 312 were created to replace BIO 310.

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Withdrawal of courses

2. Description: BIO 335 Marine Biology

Study of the physiological process by which organisms cope with the marine environment. Lab and field work will stress techniques useful in collecting and studying marine organisms.

3. Rationale (Explain why this course/program is no longer needed in the **Department)**: A new course covering the same content but with a different number was created to separate the lecture and the lab. BIO 336 and BIO 337 were created to replace BIO 335.

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Withdrawal of courses

2. **Description:** BIO 424 Ichthyology

In depth consideration of the life histories of fishes. Emphasis on the general and specific physiological adaptations of these organisms to the functional problems presented by the aquatic environment.

3. <u>Rationale (Explain why this course/program is no longer needed in the</u> <u>Department</u>): A new course covering the same content but with a different number was created to separate the lecture and the lab. BIO 425 and BIO 426 were created to replace BIO 424.

DEPARTMENT OF_BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Withdrawal of courses

2. <u>Description</u>: BIO 470 Oceanographic Research Cruise (Between spring and summer sessions.) Study of three oceanographic regimes:

estuary, sound, and open ocean. Contemporary techniques of gathering and analyzing hydrographic, biologic and geologic data from a series of stations in each of the three regimes.

3. **Rationale (Explain why this course/program is no longer needed in the Department):** The college no longer has the ship that is required for teaching the course.

DEPARTMENT OF HEALTH SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: Dietetics, Foods, and Nutrition, B.S. Hegis Number: 1306.00 Program Code: 82141 Effective Term: Spring 2019

1. Type of Change: Change in DFN Program Description and Requirements

2. From:

The program in Dietetics, Foods, and Nutrition is designed to prepare students for entrylevel positions as dietitians or nutritionists in healthcare facilities, community agencies, cooperative extension, food service operations, and/or the food industry. Students are also prepared for graduate study in dietetics and nutrition. The curriculum for the Dietetics, Foods, and Nutrition major Option I complies with the requirements for a Didactic Program in Dietetics (DPD) and is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). ACEND is located at 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995 and can be reached at 800-877-1600, ext. 5400 or by email at ACEND@eatright.org. Students successfully graduating from a ACEND-accredited D.P.D. with a GPA of 3.0 or better are eligible to take the examination to become a Registered Dietetic Technician (DTR), or apply for an ACEND-accredited dietetic internship (DI), which enables the student to become eligible to take the examination in dietetics to become a registered dietitian (RD) or RDN (Registered Dietitian/Nutritionist). Fieldwork and laboratory experiences are important components of the curriculum and are planned to integrate didactic instruction with supervised practice.

An application to declare the Didactic Program in Dietetics (Didactic Program in Dietetics, DFN major Option I) is required. The application must be submitted to the DPD director by the semester prior to acceptance and entry into the major: December 1st for entry in the Spring semester and April 1st for entry in the Fall semester.

A minimum GPA of 3.0 is required for admittance into the DPD and must be maintained or students will be dropped from the program. Students applying for acceptance into the DPD may be required to take a pre-entry examination to assess aptitude for the program.

DPD students must act in accordance with the CUNY Policy on Academic Integrity; successfully complete a course on plagiarism; and comply with the Code of Ethics for the Profession of Dietetics adopted by the Academy for Nutrition and Dietetics in order to progress in the program. Students who violate the Code of Ethics or the Policy on Academic Integrity will be dropped from the program, in addition to any other sanctions that may be imposed by the College or the Profession.

Students completing the program are required to take the DPD qualifying examination prior to receipt of the Verification Statement. For further information, please see the DPD Handbook. Students who are not accepted into Option I may elect to major in DFN Option II.

3. <u>To</u>:

The programs in Dietetics, Foods, and Nutrition (DFN) include two options: Option I (Didactic Program in Dietetics or DPD) and Option II (Culinary Nutrition and Food Service) and are designed to prepare students for entry-level employment in nutrition and food-related positions in healthcare facilities, community agencies, cooperative extension, food service operations, culinary or nutrition education, and/or the food industry. Students are also prepared for post-graduate education in nutrition and foodrelated fields.

The curriculum for the Dietetics, Foods, and Nutrition major Option I complies with the requirements for a DPD and is accredited by ACEND, the Accreditation Council for Education in Nutrition and Dietetics which is located at 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995 and can be reached at 800/877-1600, ext. 5400 or by email at ACEND@eatright.org. Students fulfilling all requirements for successful completion of the ACEND-accredited DPD are eligible for a Verification Statement and can apply for supervised practice in an ACEND-accredited dietetic internship (DI), which enables the student to take the CDR examination to become a registered dietitian nutritionist (RDN). The DPD Verification Statement also provides the opportunity to take the examination to become a Nutrition and Dietetic Technician, Registered (NDTR). DPD students must comply with the Code of Ethics for the Profession of Dietetics adopted by the Academy for Nutrition and Dietetics in order to progress in the program. Students who violate these requirements may be dropped from the program, in addition to any other sanctions that may be imposed by the College or the Profession. Students completing the program are required to take the DPD qualifying examination prior to receipt of the Verification Statement. For further information on the DPD, please see the DPD Handbook.

The Culinary Nutrition and Food Service Option (DFN Option II) prepares graduates to work in culinary nutrition education and in nutrition-oriented food service facilities. Graduates of this Option may take an additional specified course in diet therapy and apply to become certified dietary managers (CDM) via the Association of Nutrition and Foodservice Professionals (AFNP).

A minimum GPA of 3.0 is required for admission into the DPD (Option I) and a minimum GPA of 2.5 is required for Option II. These GPAs must be maintained or students will be dropped from the DFN programs. An online application to declare the DFN major is required. The application must be submitted by the semester prior to acceptance and entry into the major: December 1st for entry in the Spring semester and April 1st for

entry in the Fall semester. Students applying for acceptance into the DPD may be required to take a pre-entry examination to assess aptitude for the program.

All DFN students must act in accordance with the CUNY Policy on Academic Integrity, successfully complete a tutorial on plagiarism; and earn and maintain the ServSafe credential.

4. <u>Rationale (Explain how this change will impact learning outcomes of the department and Major/Program)</u>:

These changes in the undergraduate bulletin explain more clearly the admission policies, retention policies, and graduation policies for both Option I and Option II of the DFN programs. They more clearly describe the differences between the two options.

5. Date of departmental approval: 12-6-17

DEPARTMENT OF HEALTH SCIENCES

CURRICULUM CHANGE

1. Type of change: New Course

2.				
Department(s)	Health Sciences			
Career	[X] Undergraduate [] Graduate			
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial			
Level				
Subject Area	Dietetics, Foods, and Nutrition			
Course Prefix	DFN 440			
& Number				
Course Title	Seminar in professional practice of nutrition and dietetics			
Description	Discussion of the professional standards and code of ethics in Nutrition and Dietetics			
Pre/ Co	Pre-requisite: DFN 348			
Requisites				
Credits	2			
Hours	2			
Liberal Arts	[] Yes [X] No			
Course	NA			
Attribute (e.g.				
Writing				
Intensive,				
WAC, etc)				
General	x_Not Applicable			
Education	Required			
Component	English Composition			
	Mathematics			
	Science			
	Flexible			
	World Cultures			
	US Experience in its Diversity			
	Creative Expression			
	Individual and Society			
	Scientific World			

3. Rationale:

This seminar course will fulfill standards outlined by The Accreditation Council for Education in Nutrition and Dietetics for our option 1 students pursuing the Didactic Program in Dietetics. The course will familiarize students with the professional practice of dietetics and provide opportunities to discuss and study issues of importance. Included will be professional code of ethics, inter-professional teams, evidence-based practice, attendance at professional meetings, improving critical thinking skills, professional mentoring and precepting. By the end of this course, students will be able to describe the depth and breadth of the professional standards for dietitians as well as the opportunities and challenges within the field.

4. Learning Outcomes (By the end of the course students will be expected to):

At the completion of this course the student should be able to:

- Use current information technologies to locate and apply evidence-based guidelines and protocols.
- Apply critical thinking skills.
- Describe the governance of nutrition and dietetics practice, such as the Scope of Nutrition and Dietetics Practice and the Code of Ethics for the Profession of Nutrition and Dietetics
- Describe inter-professional relationships in various practice settings.
- Identify and describe the work of inter-professional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.
- Demonstrate identification with the nutrition and dietetics profession through activities such as participation in professional organizations and defending a position on issues impacting the nutrition and dietetics profession.
- Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.
- Explain the processes involved in delivering quality food and nutrition services.

Assessment Strategies:

- Research Paper using Evidence Analysis Library.
- Quizzes and Exams
- Reaction paper to RD and RN inter-professional team
- Reaction paper to professional meeting
- Position paper on issue impacting the profession
- Online Discussion Boards

5. Date of Departmental Approval: 12/06/2017

DEPARTMENT OF HEALTH SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: Dietetics, Foods, and Nutrition, B.S. Hegis Number: 1306.00 Program Code: 82141 Effective Term: Fall 2018

1. Type of Change: Change in Degree Requirements

2. <u>From</u>: Dietetics, Foods, and Nutrition, B.S. (49.5-61.5 Credit Major)

The distribution of courses and credits to be earned by all majors is as follows (33.5 credits):

6 credits in Health Sciences

		Credits
HSD 240	Nutrition and Health	3
HSD 266	The U.S. Health Care Delivery System	3

16 credits in Dietetics, Foods, and Nutrition:

		Credits
DFN 120	The Nature and Science of Food	3
DFN 220	Foods, Society, and Health	4
DFN 330	Quantity Food Procurement, Production, and Service	3
DFN 341	Nutrition Throughout the Life Cycle	3
DFN 430	Management of Dietetic Services	3

3 credits in Nutrition Education and Counseling:

		Credits
DFN 437	Nutrition Education & Counseling	3

4 credits in Biological Sciences:

		Credits
BIO 230	Microbiology	4

4.5 credits in Chemistry:

		Credits
CHE 114	Essentials of General Chemistry Lecture	3
CHE 115	Essentials of General Chemistry Laboratory	1.5

CHE 114, CHE 115: These courses also satisfy a General Education requirement.

Option I: Dietetics, Foods, and Nutrition, ACEND-Accredited (61.5 credits)

Additional courses to be taken (28-credits):

3 credits in Health Sciences:

		Credits
HSD 269 Fundam	entals of Biostatistics for He	alth Professionals 3

12-credits in Dietetics, Foods, and Nutrition:

		Credits
DFN 445	Advanced Nutrition	4
DFN 348	Nutrition in the Management of Disease	3
DFN 448	Nutrition in the Management of Disease II	3
DFN 470	Dietetic Services Field Experience	2
	Or	
DFN 471	Field Experience in Clinical Nutrition	2
	Or	
DFN 472	Field Experience in Community Nutrition	2

4 credits in Biology:

	Credits
BIO 228 Mammalian Physiology	4

BIO 228: BIO 181-BIO 182 (8 credits) may be substituted.

9 credits in Chemistry:

		Credits
CHE 120	Essentials of Organic Chemistry Lecture I	3
CHE 121	Essentials of Organic Chemistry Laboratory II	1.5
	And	
CHE 244	Introduction to Biochemistry	3
CHE 245	Biochemistry Laboratory	1.5

Or	
DFN 244 Nutritional Biochemistry	3
DFN 245 Nutritional Biochemistry Laboratory	1

To receive a statement verifying completion of the Didactic Program in Dietetics (DPD) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), students must successfully complete all courses required for Option I, and demonstrate computer literacy. Students must also successfully complete PSY 166, which satisfies A General Education Requirement. More information on the Didactic Program in Dietetics can be found in the DPD Handbook.

Option II: Food Service and Culinary Nutrition (49.5 Credits)

This option reflects the need for a concentration in foods, foodservice, and culinary nutrition for those students who, while seeking a degree in Dietetics, Foods, and Nutrition, are particularly interested in serving the needs of the foodservice industry as professionals providing nutritious options to restaurants, corporate and community foodservice, and catering facilities.

Additional courses to be taken (16 credits):

2 credits in Dietetics, Foods, and Nutrition:

				Credits
DFN	470 Dietetic S	Services Field Expe	rience	2

3 credits of an Elective in:

DFN, EXS, HEA, HAS, HSD, REC

8 credits in Biological Sciences:

	Credits
BIO 181 Anatomy and Physiology I	4
BIO 182 Anatomy and Physiology II	4

3 credits in Accounting:

		Credits
ACC 1	5 Introduction to Accounting for Non-Accounting Major	s 3

3. <u>To</u>: Dietetics, Foods, and Nutrition, B.S. (49.5-<u>63.5</u> Credit Major)

The distribution of courses and credits to be earned by all majors is as follows (33.5 credits):

6 credits in Health Sciences

		Credits
HSD 240	Nutrition and Health	3
HSD 266	The U.S. Health Care Delivery System	3

16 credits in Dietetics, Foods, and Nutrition:

		Credits
DFN 120	The Nature and Science of Food	3
DFN 220	Foods, Society, and Health	4
DFN 330	Quantity Food Procurement, Production, and Service	3
DFN 341	Nutrition Throughout the Life Cycle	3
DFN 430	Management of Dietetic Services	3

3 credits in Nutrition Education and Counseling:

		Credits
DFN 437	Nutrition Education & Counseling	3

4 credits in Biological Sciences:

		Credits
BIO 230	Microbiology	4

4.5 credits in Chemistry:

		Credits
CHE 114	Essentials of General Chemistry Lecture	3
CHE 115	Essentials of General Chemistry Laboratory	1.5

CHE 114, CHE 115: These courses also satisfy a General Education requirement.

Option I: Dietetics, Foods, and Nutrition, ACEND-Accredited (63.5 credits)

Additional courses to be taken (<u>30</u> credits):

3 credits in Health Sciences:

Cre	dits
HSD 269 Fundamentals of Biostatistics for Health Professionals 3	

14 credits in Dietetics, Foods, and Nutrition:

		Credits
DFN 445	Advanced Nutrition	4
DFN 348	Nutrition in the Management of Disease	3
<u>DFN 440</u>	Seminar in Professional Practice of Nutrition and Dietetics	2
DFN 448	Nutrition in the Management of Disease II	3
DFN 470	Dietetic Services Field Experience	2
	Or	
DFN 471	Field Experience in Clinical Nutrition	2
	Or	
DFN 472	Field Experience in Community Nutrition	2

4 credits in Biology:

	Credits
BIO 228 Mammalian Physio	logy 4

BIO 228: BIO 181-BIO 182 (8 credits) may be substituted.

9 credits in Chemistry:

		Credits
CHE 120	Essentials of Organic Chemistry Lecture I	3
CHE 121	Essentials of Organic Chemistry Laboratory II	1.5
	And	
CHE 244	Introduction to Biochemistry	3
CHE 245	Biochemistry Laboratory	1.5
	Or	
DFN 244	Nutritional Biochemistry	3
DFN 245	Nutritional Biochemistry Laboratory	1

To receive a statement verifying completion of the Didactic Program in Dietetics (DPD) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), students must successfully complete all courses required for Option I, and demonstrate computer literacy. Students must also successfully complete PSY 166, which satisfies A General Education Requirement. More information on the Didactic Program in Dietetics can be found in the DPD Handbook.

Option II: Food Service and Culinary Nutrition (49.5 Credits)

This option reflects the need for a concentration in foods, foodservice, and culinary nutrition for those students who, while seeking a degree in Dietetics, Foods, and Nutrition, are particularly interested in serving the needs of the foodservice industry as professionals providing nutritious options to restaurants, corporate and community foodservice, and catering facilities.

Additional courses to be taken (16 credits):

2 credits in Dietetics, Foods, and Nutrition:

	Credits
DFN 470 Dietetic Services Field Experience	2

3 credits of an Elective in:

DFN, EXS, HEA, HSA, HSD, REC

8 credits in Biological Sciences:

	Credits
BIO 181 Anatomy and Physiology I	4
BIO 182 Anatomy and Physiology II	4

3 credits in Accounting:

	Credits
ACC 185 Introduction to	Accounting for Non-Accounting Majors 3

Rationale: Addition of DFN 440 is needed to comply with standards outlined by The Accreditation Council for Education in Nutrition and Dietetics for our option 1 students pursuing the Didactic Program in Dietetics.

DEPARTMENT OF LANGUAGES AMD LITERATURES

CURRICULUM CHANGE

1. Type of Change: Increase number of times one can take course.

2. From:

Department(s)	Languages and Literatures
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Hispanic Literature
Course Prefix & Number	SPA 352
Course Title	Special Topics in Hispanic Literature
Description	Study of selected themes (e.g., women) or modes (e.g., parody) or literary forms and strategies (e.g., first person narrative) in Peninsular and/or Spanish American literatures.
Pre/ Co Requisites	Department Consent Required
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course Attribute (e.g.	NA
Writing Intensive, WAC, etc)	
General Education Component	<pre>X_Not ApplicableRequiredEnglish CompositionMathematicsScience</pre>
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

3. <u>To</u> :	
Department(s)	Languages and Literatures
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Hispanic Literature
Course Prefix	SPA 352
& Number	
Course Title	Special Topics in Hispanic Literature
Description	Study of selected themes (e.g., women) or modes (e.g., parody) or literary forms and strategies (e.g., first person narrative) in Peninsular and/or Spanish American literatures.
Pre/ Co Requisites	Department Consent Required
Credits	3 (May be repeated when topics change. Maximum 9 credits.)
Hours	3
Liberal Arts	[X] Yes [] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the department and Major/Program)</u>:

Students are encouraged to take selected topics courses multiple times when topics change.

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: Classical Greek, Minor Effective Term: Fall 2018

1. <u>Type of Change</u>: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> <u>Classical Greek Minor</u> <u>Required Courses (12 Credits)</u>

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. Rationale (Explain how this change will impact learning outcomes of the department and Major/Program): This minor currently exists but is missing from the undergraduate bulletin.

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: French, Minor Effective Term: Fall 2018

1. <u>Type of Change</u>: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> <u>French Minor</u> <u>Required Courses (12 Credits)</u>

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. Rationale (Explain how this change will impact learning outcomes of the department and Major/Program): This minor currently exists but is missing from the undergraduate bulletin.

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: Irish, Minor Effective Term: Fall 2018

1. <u>Type of Change</u>: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> <u>Irish Minor</u> <u>Required Courses (12 Credits)</u>

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. <u>Rationale (Explain how this change will impact learning outcomes of the</u> <u>department and Major/Program</u>): This minor currently exists but is missing from the undergraduate bulletin.

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: Italian, Minor Effective Term: Fall 2018

1. <u>Type of Change</u>: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> <u>Italian Minor</u> <u>Required Courses (12 Credits)</u>

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. <u>Rationale (Explain how this change will impact learning outcomes of the</u> <u>department and Major/Program</u>): This minor currently exists but is missing from the undergraduate bulletin.

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: Japanese, Minor Effective Term: Fall 2018

1. **<u>Type of Change</u>**: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> Japanese Minor Required Courses (12 Credits)

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. <u>Rationale (Explain how this change will impact learning outcomes of the</u> <u>department and Major/Program</u>): This minor currently exists but is missing from the undergraduate bulletin.

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: Latin, Minor Effective Term: Fall 2018

1. <u>Type of Change</u>: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> <u>Latin Minor</u> <u>Required Courses (12 Credits)</u>

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. Rationale (Explain how this change will impact learning outcomes of the department and Major/Program): This minor currently exists but is missing from the undergraduate bulletin.

5. Date of departmental approval: 1/31/18

DEPARTMENT OF LANGUAGES AND LITERATURES

CURRICULUM CHANGE

Name of Program and Degree Award: Spanish, Minor Effective Term: Fall 2018

1. <u>Type of Change</u>: Add pre-existing minor to undergraduate bulletin.

2. From:

3. <u>To:</u> <u>Spanish Minor</u> <u>Required Courses (12 Credits)</u>

Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level.

4. Rationale (Explain how this change will impact learning outcomes of the department and Major/Program): This minor currently exists but is missing from the undergraduate bulletin.

5. Date of departmental approval: 1/31/18

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

Curriculum Change

Hegis # : Art 1002; English 1501; Foreign Language 1105; Health 0837; Mathematics 1701; Biology 0401; Chemistry 1905; Geology 1914; Physics 1902; Social Studies 2205

Program Code: Art 25929; English 25935; Foreign Language 25938; Health 25952; Mathematics 25939; Biology 25940; Chemistry 25941; Geology 32668; Physics 25942; Social Studies 31964

1. <u>Type of Change</u>: Admission Requirement

2. <u>From</u>:

Program Requirements for Undergraduate Secondary Teacher Education (Art, English, Foreign Language, Mathematics, Science, and Social Studies)*

The Certification Sequence (13-16 credits)

Entrance

In order to continue beyond the Minor and into the Certification Sequence as a teacher candidate, the student must meet the following criteria:

- 1. Enter the Certification Sequence with a minimum overall GPA of 3.0;
- 2. Complete half of the major courses; and
- 3. Submit the Declaration of Academic Plan and Sub-plan (Leading to Teacher Certification) to the education adviser.

Continuation

Teacher candidates must maintain a minimum overall GPA of 3.0 and achieve a passing score on the Academic Literacy Skills Test (ALST).

The Certification Sequence comprises four additional ESC courses (13 credits)⁴: two (7 credits) in teaching methods and two (6 credits) in the Student Teaching Experience.

Teaching Methods and/or Special Needs Students A teaching methods course ESC 410-462 (4 credits) for art¹, English², foreign language³, math⁴, science⁵, and social studies⁶ and/or ESC 463 (3 credits) Special Needs Education.

Student Teaching Experience and Seminar

Before entering the student teaching experience, candidates should submit passing scores from the EAS (Educating All Students) and CST (Content Specialty Test) certification tests.

ESC 470 (3 credits) Student Teaching in the Middle and High School

ESC 471 (3 credits) Student Teaching Seminar

Exit

In addition to completing the above ESC course requirements, the candidate must complete the following additional requirements to exit the program and receive Lehman College's recommendation for New York State Teacher Certification:

- All candidates seeking New York State Teacher Certification must have a minimum of 6 credits (two college-level courses) in each of the following four Liberal Arts and Science subject areas: Mathematical Processes, Scientific Processes, Concepts in Historical and Social Sciences, and English/Literature.
- 2. Complete two semesters of college-level study of a language other than English.
- Complete three State-mandated workshops on (a) Child Abuse Identification and Reporting; (b) School Violence Intervention and Prevention; and (c) Dignity for All Students Act (DASA).
- 4. Foreign language candidates must complete courses 3180 and 3190 in their language majors, and pass the ACTFL OPI (oral proficiency interview).
- 5. Social studies teacher candidates must additionally complete 3-credit courses (for a total of 24 credits) with grades of C or better in each of the following social science disciplines: Anthropology, Economics, European or World History, Geography, Political Science, Psychology, Sociology, and U.S. History.

¹Art candidates earn K-12 certification, and therefore complete ECE 350 (3 credits), ESC 414 (4 credits), and one additional ESC course in consultation with the education adviser.

²English candidates complete ESC 410 and ESC 422.

³Foreign language candidates complete ESC 424 and ESC 462.

⁴Math candidates complete ESC 432 and ESC 4480.

⁵Science candidates complete ESC 419 and ESC 467.

⁶Social studies candidates complete ESC 433 and ESC 434.

*The Health program has been discontinued and will not accept future applicants.

3. <u>To</u>:

Program Requirements for Undergraduate Secondary Teacher Education (Art, English, Foreign Language, Mathematics, Science, and Social Studies)*

The Certification Sequence (12-16 credits)

Entrance

In order to continue beyond the Minor and into the Certification Sequence as a teacher candidate, the student must meet the following criteria:

- 4. Enter the Certification Sequence with a minimum overall GPA of 3.0;
- 5. Complete half of the major courses; and
- 6. Submit the Declaration of Academic Plan and Sub-plan (Leading to Teacher Certification) to the education adviser.

Continuation

Teacher candidates must maintain a minimum overall GPA of 3.0.

The Certification Sequence comprises <u>five</u> additional ESC courses <u>in methods</u>, <u>fieldwork</u> <u>and student teaching</u>.

Teaching Methods and/or Special Needs Students

In consultation with the education adviser, candidates who completed ESC 463 as part of the minor will select two method courses in their content areas. If they have not, they will select ESC 463 and their remaining method course:

ESC 463 (3 credits) Special Needs Education Art methods: ESC 414 (3 credits) and DEC 436 (3 credits) English methods: ESC 410 (2 credits) and ESC 422 (3 credits) Foreign language methods: ESC 462 (2 credits) and ESC 424 (3 credits) Math methods: ESC 4480 (2 credits) and ESC 432 (3 credits) Science methods: ESC 467 (2 credits) and ESC 419 (3 credits) Social studies methods: ESC 433 (3 credits) and ESC 434 (3 credits)

ESC 477 (1 credit) Fieldwork in Secondary Schools II

Student Teaching Experience and Seminar Before entering the student teaching experience, candidates should submit passing scores from the EAS (Educating All Students) and CST (Content Specialty Test) certification tests.

ESC 470 (3 credits) Student Teaching in the Middle and High School

ESC 471 (3 credits) Student Teaching Seminar

Exit

In addition to completing the above ESC course requirements, the candidate must complete the following additional requirements to exit the program and receive Lehman College's recommendation for New York State Teacher Certification:

- 6. All candidates seeking New York State Teacher Certification must have a minimum of 6 credits (two college-level courses) in each of the following four Liberal Arts and Science subject areas: Mathematical Processes, Scientific Processes, Concepts in Historical and Social Sciences, and English/Literature.
- 7. Complete two semesters of college-level study of a language other than English.
- Complete three State-mandated workshops on (a) Child Abuse Identification and Reporting; (b) School Violence Intervention and Prevention; and (c) Dignity for All Students Act (DASA).
- 9. Foreign language candidates must complete courses 3180 and 3190 in their language majors, and pass the ACTFL OPI (oral proficiency interview).
- 10. Social studies teacher candidates must additionally complete 3-credit courses (for a total of 24 credits) with grades of C or better in each of the following social science disciplines: Anthropology, Economics, European or World History, Geography, Political Science, Psychology, Sociology, and U.S. History.

*The Health program has been discontinued and will not accept future applicants.

4. Rationale:

As we move toward more clinically-rich programs, these changes will enable the program to create two, newly-designed semester-long 1-hour weekly seminars (ESC 476 and ESC 477). Candidates will no longer be required to do field hours in the education foundations and methods courses. The number of credits in the undergraduate sequence will remain unchanged. Further, the art education program changed their childhood methods course from ECE 350 to DEC 436, which aligns more closely with the certification requirements. And lastly, New York State eliminated the ALST exam.

5. Date of departmental approval: 11/9/2017

DEPARTMENT OF MUSIC, MULTIMEDIA, THEATRE, AND DANCE

CURRICULUM CHANGE

1. Type of change: New Course

2.

Ζ.	
Department(s)	Music, Multimedia, Theatre, and Dance
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Music Performance
Course Prefix	MSP 186
& Number	
Course Title	Guitar 2
Description	Continued study and practice of guitar with focus on reading, technique, and ensemble playing.
Pre/ Co	MSP 185 or permissions from the instructor
Requisites	
Credits	1 (can be repeated to a maximum of 4 credits)
Hours	2
Liberal Arts	[]Yes [X]No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	_X Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. **<u>Rationale</u>**: The department has long offered a course titled MSP 185 Elementary

Guitar Playing and in the past few years, enrollment has grown consistently. Unlike other practical instrumental courses in our course offerings which have at least 2 sequential courses, there is only 1 guitar course (compare with: Strings 1 and 2, Brass 1 and 2, Woodwinds 1 and 2, Piano 1, 2, and 3). Students have asked to continue their studies at a more advanced level and this year an informal second section of MSP 185 was offered for those wanting to continue. We seek to formalize this arrangement with a second course.

4. Learning Outcomes (By the end of the course students will be expected to):

- read musical passages and melodies including selected folksongs and classical paraphrases that contain whole, half, quarter & eighth notes, as well as ties
- transpose chords to another key to accommodate ease of playing or vocal range for songs
- use different accompaniment styles for different genres, tempos and styles and make appropriate musical decisions in different musical contexts
- play diatonic scales in keys that include more than 2 sharps or flats
- Self-monitor practice sessions in regards to technical proficiency and good sound production and make appropriate adjustments
- 5. Date of Departmental Approval: January 25, 2018

DEPARTMENT OF MUSIC, MULTIMEDIA, THEATRE & DANCE

CURRICULUM CHANGE

1. Type of Change: Course title

2. From:

Department(s)	Music, Multimedia, Theatre, and Dance
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Music Performance
Course Prefix & Number	MSP 185
Course Title	Elementary Guitar Playing
Description	Basic accompaniment patterns, chords, melody playing, simple songs, etudes, beginning to read music, understanding of rudimentary harmony.
Pre/ Co Requisites	NA
Credits	1 (can be repeated to a maximum of 4 credits)
Hours	2
Liberal Arts	[] Yes [X] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	 X_ Not Applicable Required English Composition Mathematics Science Science Vorld Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

Department(s)	Music, Multimedia, Theatre, and Dance
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Music Performance
Course Prefix & Number	MSP 185
Course Title	Guitar 1
Description	Basic accompaniment patterns, chords, melody playing, simple songs, etudes, beginning to read music, understanding of rudimentary harmony.
Pre/ Co Requisites	NA
Credits	1 (can be repeated to a maximum of 4 credits)
Hours	2
Liberal Arts	[] Yes [X] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression Individual and Society
	Scientific World

4. <u>Rationale (Explain how this change will impact the learning outcomes of the department and Major/Program)</u>:

The change in title is to bring guitar instruction into line with other instrumental methods courses offered by the department (Strings 1, Strings 2, etc.). The department is adding a second semester to the sequential study of this instrument and wish to make the titles of the 2 courses uniform, and clear in their sequential order.

5. Date of departmental approval: January 25, 2018

DEPARTMENT OF_MUSIC, MULTIMEDIA, THEATRE, AND DANCE

CURRICULUM CHANGE

1. Type of change: Experimental Course

2.

Department(s)	Music, Multimedia, Theatre, and Dance
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Music Performance
Course Prefix	MSP 225
& Number	
Course Title	Singing for the Stage
Description	Fundamentals of singing, lyric text interpretation, musicianship, style,
	and their application in the performance of selected vocal repertoire for
	stage performance.
Pre/ Co	NA
	NA
0	
,	
Component	
	Flexible
	Scientific World
Requisites Credits Hours Liberal Arts Course Attribute (e.g. Writing Intensive, WAC, etc) General Education Component	2 2 []Yes [X] No NA

3. Rationale:

Students have long requested a course in singing for the stage, particularly addressing the vocal needs of majors other than music, especially theatre students. Recent musical-theatrical undertakings by the department have brought this need to light once again, as students have sought training in a variety of vocal techniques. Courses in vocal technique in the music major typically focus on song literature and require the ability to read music. This course is intended for those who are not seeking professional voice instruction, and whose primary singing will be done in the context of theatrical performances.

Emphasis will be given to the development of healthy, efficient, communicative singing habits.

Students will have repeated exposure to a musical environment that will foster functional music-making skills suitable for the musical theater rehearsal room.

4. Learning Outcomes (By the end of the course students will be expected to):

- Students will develop and apply fundamental phonation techniques related singing and text declamation in order to promote healthy vocal habits suitable for on- and off-stage singing and speaking, both amplified and acoustic.
- Students will develop a fundamental approach to music-making, music-learning, and basic musical analysis.
- Students will analyze texts and scenes and refine the text-delivery skills necessary to promote the synthesis of music, oration, and theater.
- Students will refine articulatory/diction skills.
- Students will understand and develop healthy, efficient, communicative singing habits.

5. Date of Departmental Approval: January 25, 2018

DEPARTMENT OF SOCIAL WORK

CURRICULUM CHANGE

Name of Program and Program Award: Aging, Minor Hegis #: 2104.00 Program Code: 82477 Effective Term: Spring 2019

1. Type of Change:

- a. Changes in Coordinators and Steering Committee members.
- b. Changes in courses approved for the Minor and the Schools involved.
- c. Addition of limit of number of credits towards the minor that may be taken in any one department.

2. <u>From</u>:

Program Description: 12-Credit Interdisciplinary Minor in Aging

Coordinator: Norma Phillips (Professor and Chair, Social Work) Steering Committee: Luisa Borrell (Associate Professor, Health Sciences), Stephen Cavallo (Associate Professor and Chair, Speech-Language-Hearing Sciences), Juan DeLaCruz (Assistant Professor, Economics & Business), Sharon Freedberg (Associate Professor, Social Work), Alan Kluger (Professor and Chair, Psychology), Patricia Kolb (Associate Professor, Social Work)

Degree Requirements

Students will satisfy the College requirement of a minor field by taking four courses (12 credits) at the 200- and 300-level. At least six credits must be taken in 300-level courses or a higher-level course approved by the Program.

Students will select in consultation with their advisor from the following menu of relevant 3-credit courses offered in various departments in the Schools of Natural and Social Sciences and Arts and Humanities:

200-level courses: PSY 219 (Psychology of Adulthood and Aging) SOC 243 (The Aged in Modern Society) SWK 242 (Social Work Practice with Older Adults) Any relevant 200-level course approved by the Program 300-level courses or a higher-level course approved by the Program:
ECO 313 (Economics of Aging)
HEA 310 (Health and Aging)
HEA 360 (Special Topics in Health)
SOC 343 (Sociological Theories of Aging)
SPV 300 (Neurolinguistics of Aging)
SWK 342 (Social Welfare Policies in an Aging Society)
Any relevant 300-level or higher course approved by the Program.

3. <u>To</u>:

Program Description: 12-Credit Interdisciplinary Minor in Aging

Coordinators: <u>Patricia Kolb (Social Work), Wingyun Mak (Psychology</u>); Steering Committee: <u>Mary Boylan (Speech-Language-Hearing Sciences);</u> <u>Catherine</u> <u>Cassidy (Social Work);</u> Stephen Cavallo (Speech-Language-Hearing Sciences); <u>Danna Ethan</u> (Health Sciences); Alan Kluger (Psychology); <u>Madeline Moran,</u> (Sociology)

Degree Requirements

Students will <u>complete</u> four courses (12 credits) at the 200- and 300-level. At least six credits must be taken in 300-level courses or a higher-level course approved by the Program. <u>No more than 6 credits may be taken in any one department.</u>

Students will select in consultation with their advisor from the following menu of relevant 3-credit courses offered in various departments in the Schools of Natural and Social Sciences and <u>Health Sciences</u>, <u>Human Services</u>, and <u>Nursing</u>.

200-level courses: PSY 219 (Psychology of Adulthood and Aging) SOC 243 (The Aged in Modern Society) SWK 242 (Social Work Practice with Older Adults) Any relevant 200-level course approved by the Program

300-level courses or a higher-level course approved by the Program:
HEA 310 (Health and Aging)
HEA <u>336 (Death and Dying)</u>
<u>PSY 366 (Clinical Neuropsychology)</u>
SOC 343 (Sociological Theories of Aging)
SPV 300 (Neurolinguistics of Aging)
SWK 342 (Social Welfare Policies in an Aging Society)
Any relevant 300-level or higher course approved by the Program.

4. Rationale:

- a. Changes in Coordinators and Steering Committee members The Steering Committee voted new coordinators as Prof. Phillips is retiring; other changes reflect changes in participation; rank and position were removed because of ongoing changes.
- b. Changes in courses approved for the Minor and the Schools involved -The course ECO 313 was never developed and no plans are in place for it; PSY 366 will meet an important curriculum area for students; HEA 360 is a Special Topics course and it is important to specify that only Death and Dying is acceptable for the minor. Changes in administrative structure require corrections.
- c. Addition of limit of number of credits towards the minor that may be taken in any one department – While no department is currently offering more than 6 credits, it is likely this will change in the near future. The Steering Committee agreed that it is important to limit the number of credits to 6 from any one department in order to preserve the interdisciplinary nature of the minor.
- 5. <u>Date of Steering Committee Approval</u>: November 27, 2017 <u>Date of Social Work Department Approval</u>: December 6, 2017

DEPARTMENT OF_SOCIOLOGY

CURRICULUM CHANGE

Name of Program and Degree Award: Sociology, B.A. Hegis Number: 2208.00 Program Code: 34034 Effective Term: Spring 2018

1. Type of Change: New Interdisciplinary Minor

2. To: 15 to 18-Credit Interdisciplinary Minor in Data Science Methods and Applications

Coordinator: Elin Waring (Sociology)

<u>Steering Committee: Juan DelaCruz (Economics and Business), Itai</u> <u>Feigenbaum (Computer Science), Juliana Maantay (Earth, Environmental, and</u> <u>Geospatial Sciences), Elia Machado (Earth, Environmental, and Geospatial Sciences),</u> <u>Christopher Malone (Associate Dean, Natural and Social Sciences, Associate</u> <u>Professor, Political Science), Megan Owen (Mathematics), Nikolaos Papanikolaou</u> (Economics and Business), Naomi Spence (Sociology)

The minor in data science methods and applications is appropriate for students in majors across various disciplines who are interested in learning methods for working with big, complex, and/or "messy" data and application to real world topics. The minor provides students with interdisciplinary course work focused on obtaining, managing, analyzing, interpreting and communicating about data in all of its forms. Students will learn Python and R programming, as well as other languages used by data scientists.

Degree Requirements

Group 1 Required (9 credits)

MAT 128Foundations of Data Science (prerequisite: Score of 65 or higher on
College Math section of Accuplacer exam or department permission)MAT 328Techniques in Data Science (prerequisite: MAT 128)SOC 3470 Reasoning with Data (prerequisite: Completion of College Math
Requirement; PHI 169 or a 200 level Sociology course; or by permission of
Department.)

<u>Group 2 (3-5 credits)</u> <u>Disciplinary Data Analysis Course</u> <u>Select as appropriate:</u> <u>SOC 345 (prerequisite: SOC 301 with a grade of C- or better), PSY 226 (prerequisite:</u> <u>PSY 166; and MAT 132 or MAT 172 or MAT 174 or MAT 175), GEH 245, ECO 302</u> (prerequisite: ECO 166; and MAT 132 or MAT 171 or MAT 172 or MAT 174 or MAT 175), BBA 303 (prerequisite: MAT 132 or MAT 171 or MAT 172 or MAT 174 or MAT 175), BIO 240 (prerequisite: BIO 166 and BIO 167 and MAT 175), HSD 269 (prerequisite: MAT 132 or its equivalent, or demonstrated competence in database manipulation, spreadsheet calculations, and word processing), MAT 301 (prerequisite: MAT 132 and MAT 171), MAT 327 (prerequisite: MAT 176), MAT 330 (prerequisite: MAT 176), or another course approved by the program.

Group 3 Elective (3-4 Credits)

One elective from this list:

SOC 339 American Demography (prerequisite: SOC 301) GEP 330 Spatial Statistics and Advanced Quantitative Methods in Geography (prerequisite: GEP 204 or GEP 205 or instructor's permission. An introductory course in descriptive statistics is recommended.) GEP 360 Geovisualization and Analytic Cartography (prerequisite: GEP 204 or GEP 205 or Department Permission) ECO 402 Econometrics (prerequisite: ECO 302 or BBA 303) CMP 414 Artificial Intelligence (prerequisite: CMP 338) MAT 327 Statistical Inference (prerequisite: MAT 176) MAT 349 Operations Research (prerequisite: MAT 313 and CMP 167) CMP 446 Computational Tools for Bioinfomatics (prerequisite: BIO 166, CMP 167, and CMP 232) Or course approved by the program. Independent studies must present a proposal that explains the relationship to data science.

Data Science students should be aware that graduate programs in Data Science, Biostatistics, and Data Analytics generally expect that students have completed at least Calculus 1, Linear Algebra, and Programming 1 (CMP 167) at the undergraduate level.

3. <u>Rationale:</u> Data science is a relatively new, rapidly growing, interdisciplinary field that involves a combination of data analysis, programming and domain-specific knowledge with a distinctive approach that often focuses on big data and application to real world topics. The StatSNSF committee describes data science as the "science of planning for, acquisition, management, analysis of, and inference from data."

Lehman College has many students across the campus who analyze big data sets as part of their scholarship, but the coursework to provide data skills is often scattered and difficult for students to assemble. As a result of meetings with faculty, we propose a minor that emphasizes those skills particularly for students in data-intensive majors. The proposed minor will allow Lehman students to combine these elements through a set of core and elective courses that can complement their work in many different majors.

The minor emphasizes programming and statistics for large data sets and includes a data-intensive upper division course that applies these skills to disciplines across the natural and social sciences as well as other schools.

4. Date of Steering Committee Approval: September 6, 2017 Date of Department of Sociology Approval: September 6, 2017

Undergraduate Curriculum Committee

Subcommittee on Major/Minor Policies

Charge:

- 1. To examine current policies and practices regarding the sharing of courses/credits between majors, minors and certificates.
- 2. To assess the impact of current policies and practices on the curriculum and on student success.
- 3. To recommend changes and/or new policies in these areas to the UCC.
- 4. To consider and recommend changes and/or new policies to the UCC in related areas affecting the curriculum and student success.

Composition:

- 1. Lynn Rosenberg, Speech, Language, and Hearing Sciences, Subcommittee Chair, representative from the UCC
- 2. Sandra Campeanu, Psychology, representative from Committee on Admissions, Evaluations and Academic Standards (CAEAS)
- 3. Pamela Mills, Chair of Chemistry
- 4. Collin O'Neil, Philosophy
- 5. Jose Acevedo, Student
- 6. Daniel Encarnacion, Student
- 7. Liliana Calvet, Director, Office of Academic Standards and Evaluation
- 8. Ronald Banks, Director, Strategic Persistence Initiatives
- 9. Stefan Becker, Vice Provost for Academic Programs



Library Technology and Telecommunications Senate Committee Meeting

Meeting Date: February 28, 2018

Attendance: Stephen Castellano, Sherry Deckman, Anna Luerssen, Edi Ruiz, Kenneth Schlesinger, Vincent Sandella, Olena Zhadko

Student Senator Representatives: No Student Senators Present at Meeting of 02/28/2018

Excused: Raymond Diaz, Ron Bergmann

Library Report:

- Library offered 24-Hour Study Hall for Midterm Exams from March 12-26, presented in cooperation with Public Safety and Student Government.
- A Complimentary Digital subscription to **The Wall Street Journal** is now available to the Lehman and CUNY Community. To activate your subscription, visit the Library website, select **BROWSE DATABASES A-Z**, go to **W** and look for **WALL STREET JOURNAL**. Enter the required information. You may also download the WSJ App from the App Store or Playstore.
- Library will sponsor Poetry Reading with City and Humanities on April 12th featuring works by Salita Bryant and Robert Farrell.
- Library and Online Education have collaborated on LEH 300 Information Literacy Tutorial which will be piloted during Spring 2018.

Division of Information Technology:

- The IT Division is nearing the completion of an upgrade of the college telephone system, which processes more than 1.3 million calls annually. The next milestone is an upgrade of the faculty and staff voicemail system which is scheduled for Friday evening. Please note that your voice messages will be migrated to the new system. New features will include the ability to receive voice messages as an attachment to email. Please refer to today's email for more information.
- The Tech Fee Committee has held several meetings and recommendations to the President are now being prepared.
- Ron Bergmann and Edi Ruiz presented the draft 2018/2019 IT Roadmap for feedback to a variety of groups including our Senate committee, the Provost's Council, and a recent retreat of student leaders, among others. The roadmap will be posted shortly.

• Finally, the division is pleased to announce the launch of a new IT security website. The new site presents the college community with information on cyber security and how to stay safe online

Blackboard Report

- Blackboard users may have noticed a new addition to their Bb Homepage. Looking slightly to the left of your name on Bb, you will notice a new link: **MAKE THIS WEBSITE TALK**. This link is a software called **BROWSE ALOUD**. The software will read the website to the user. Browse Aloud was installed to further our efforts to remain complaint to ADA regulations.
- A new Blackboard course template was delivered to CUNY-CIS on March 21st. The template contains some minor upgrades to make the Bb experience more efficient and enjoyable for our community of Instructors and Learners. Thank you to our Faculty participating in a focus group for the new template.
- The Bronx Ed Tech Showcase is coming up on April 27th at Hostos Community College. This year's showcase theme is: **Igniting Innovation: Literacy, Access and Learning.** The Showcase is free and we are looking for volunteers to assist with conference logistics. If you are interested, please feel free to see me following this meeting.

Respectfully submitted,

Stephen Castellano

Chair, Library Technology and Telecommunications Committee

March 28, 2018 Lehman Senate Budget Committee Report

Based on committee meeting on 2/28/2018

Membership and attendance of Joint committee of Senate and FP&B Budget and Long-Range Planning

Senators	FP&B members	Administration	Students		
Haiping Cheng	James Mahon	Vincent Clark	Saac Atif		
Amod Choudharv	Abigail McNamee	Harriet Fayne	Shaffiou Assoumanou		
Thomas Conroy	Brian Murphy	Bethania Ortega			
Gul Sonmez	Dene Hurley		Guest		
Sheila Blachman	Ryan Raaum		Ruth Wanger		
Daniel Kabat	Marie Marianetti				

The Budget committee meeting was called to order at 1:40 pm by Haiping Cheng on Feb 28, 2018, in Shuster 336.

Lehman College budget update, VP Clark

>>FY2018 2nd quarter financial report was presented and discussed in detail. (details on next slide)

Provost report:

>> Faculty travel funds for FY2018 by schools was presented and discussed.

>> Update on current faculty search: 20 replacement lines and 5 new lines.

>> Update on faculty searches in FY2019: 8 replacement lines and 5 new lines.

Lehman Foundation financial report (detail in next senate meeting)

Lehman Grant and Contract Office, FY17 recovery budget (detail in next senate meeting)

EV2019 Mid Voor Donort

March 28, 2018

Lehman Budget Committee Report

Based on VP Clark's budget report on Feb 21, 2018

	FYZU18 Mild Year Report						
NY State Funding to Lehman \$ 100 M*		Spending PS regular OTPS(strategic) Adjuncts		2017	(%to	otal)	
NY reduction 2% (\$0.9M)				77.9M		3.4%	
♠ \$4.14M increase due to				8.1N	Л	7.6%	
exceeding enrollment target				14.3	И 1	3.5%	
		Temp	service	4.1	И 3	.9%	
Saving/Year 2017 \$6.1 M		Unallo	ocated	1.71	И 1	.6%	
	Budget Highlights	2015	2016	2017	2018	2019	2020
Lehman Foundation	Strategic Investment				\$1.3M	\$1.6M	\$1.9M
Philanthropy	New faculty	11	0	0	2	5	5
	Year end saving	\$5.1M	\$6.9M	\$6.0M	\$1.7M	?	?

*:"projected resources" minus "other funds" **Green: increase from previous year,

Next Budget meeting: May 2, 2018 1-3pm, S-336

Red: decrease from previous year.

UFS Report to Lehman Senate

The University Faculty Senate of CUNY met on Tuesday March 13 at the Graduate Center.

I. Enrollment Management Report

Senior Vice Chancellor and Chief Financial Officer Matthew Sapienza spoke briefly to inform the body that enrollment now reports to his area and that enrollment at CUNY has been relatively stable compared with other colleges and universities across the country.

Presentations were received from AVC for Enrollment Strategies Laura Bruno, University Director of Undergraduate Recruitment Mark Ciollo, and University Director of Graduate Enrolment Sonja Prophete who gave an overview of the CUNY Welcome Center, some statistics about CUNY students and recruitment strategies that the university pursues; applications to CUNY are up 8% over last year and that is a consistent rate of growth compared to the past 3-4 years. Graduate programs are similarly served by a central recruitment office that holds events and cross-promotes college events; nationally we expect to see enrollment in Graduate programs grow by 12% over the decade 2015-2026; 2017 saw the highest Graduate enrollment at CUNY in its history, higher even than during the recession but CUNY still only has a 26% market share in Graduate education; some opportunity areas were presented including online teacher ed (like Tuoro which is where many of our students go after finishing undergraduate studies), Masters in Occupational Therapy, and online Masters in Computer Science.

When students visit campus they want to interact with faculty and this in turn helps them make a decision to enroll. We are encouraged to find ways of hosting events on campus that involve faculty meeting potential students.

II. Student Affairs: Student Activity Fee

General Counsel and Vice Chancellor for Legal Affairs Loretta Martinez

along with the Student Affairs Committee presented an update on proposed changes to the CUNY By-Laws in response to a legal case at Queens and a Supreme Court decision regarding the dispersal of student fees. Fees collected must be dispersed in a "viewpoint neutral" way and it was determined that referenda, given the extremely low voter turnout, cannot guarantee a "viewpoint neutral" outcome. Moreover, there was question about the legality of turning over student fees to third party advocacy and nonuniversity affiliated lobbying agencies.

VC Martinez summarized the state of student activity fees thusly: they are the lowest in the country, their use is typically decided by a budget committee which is majority

student and by a campus association committee made up of Full-time college employees (administrators and faculty) who follow the recommendations of the budget committee. Generally 20% of the collected fees go to clubs and student activities. The other 80% go towards services, intermural sports, veterans support, shuttle buses, college space, even to back bonds for major capital projects. Proposed changes to the By-Laws were intended to give student government associations at the campuses greater autonomy and authority over that 20%.

The administration would like to bring the changes before the Board of Trustees on May 7 for a vote. Currently they are seeking input. Many speakers signed up to testify before the board at its Brooklyn Borough hearing Monday night, March 12.

The University Student Senate has prepared an informational website about the case law that prompted these proposed changes as well as their stance toward the university's proposed changes. <u>http://www.usscuny.org/student-activity-fees</u>

The UFS published a blog post on the issue last month: http://www1.cuny.edu/sites/cunyufs/2018/02/16/taking-the-measure-of-student-fees/

III. Reports from SUNY

Guests from **SUNY Faculty Senate** and **SUNY Faculty Council of Community Colleges** presented work they are doing across the state, namely, writing a position paper on the status of adjuncts and a faculty-driven reconsideration of General Education at SUNY with the goal of a White Paper this year and a Green Paper by next year in order to facilitate implementation of a faculty designed core. SUNY's most recent Gen Ed revision took place in 1999. They held a faculty conference on shared governance and Middle States. At the Community Colleges, faculty are looking at transfer paths and the mobility of students to see how they accrue credits and move toward graduation.

The also pass a policy statement on **microcredentialing** with strong language about the involvement of faculty to counter act the force of industry. This comes in response to a university-wide task force that ended with a resolution to the board to accept the task force's report: <u>http://www.nysed.gov/common/nysed/files/principal-project-phase-2-suny-microcredentials.pdf</u>

IV. Academic Affairs: Advanced Placement

Academic Affairs Committee reported on a memo from from Vice Chancellor Vita Rabinowitz that states "all CUNY colleges shall grant academic credits to any student earning a score of 3 or higher on any AP examination. The colleges, in consultation with faculty in the discipline corresponding to the individual AP exams, shall determine how those credits are applied to the degree." i.e. a specific course, a general education category, or elective credit. Such equivalencies should be in place and made available to students seeking accurate credit transfer information on your college web site prior to Fall 2018. Some college reporting that their departmental P&Bs or departments as a whole had been asked to vote on specific AP courses.

V. Chair's Report

UFS Chair Kay Conway reported the following:

- Chancellor's Search Committee will have its first meeting March 20
- Many Discipline Councils have been meeting and she encouraged disciplines to convene to discuss intra-campus concerns, one of those being the treatment of prior-learning credit for adult students
- The Chair's Handbook at Queens is regarded as a model that is being adopted by other schools, namely CSI
- IT committee is working on a single sign-on for CUNY especially for use of shared library resources
- IT committee is working on a position paper regarding cloud storage in response to a proposed CUNY policy which would institute penalties for faculty who use unauthorized applications. Unauthorized applications include: Dropbox, iCloud, Amazon Cloud Drive, Google Drive, SurveyMonkey, MailChimp
- Research Foundation will roll out a new website this week
- Jerry Z. Muller spoke at Hunter College Faculty Delegate Assembly about his book *Tyranny of Metrics*; summary in a blog post on the UFS http://www1.cuny.edu/sites/cunyufs/2018/03/14/what-counts-jerry-z-muller-discusses-the-tyranny-of-metrics-at-hunter-college/
- She encourage faculty to join the CUNY Academy which supports faculty research with awards like the Feliks Gross award

Respectfully submitted

Janette Tilley

Associate Professor, MMTD

Next meeting: Tuesday, April 24, 2018