1	Minutes of			
2	The Lehman College Senate Meeting Wednesday, December 11, 2019			
3	Wednesday, December 11, 2019 Senate Meeting			
4 5	Senate Meeting			
6				
7	Senators Present: Abreu, S.; Acevedo, J.; Aisemberg, G.; Alexander-Street, A.; Ali, S.; Allison, A.;			
8	Auslander, D.; Austin, L.; Banks, R.; Baraldi, C.; Bautista Martinez, C.; Begum, M.; Bergmann,			
9	R.Boston, N.; Britt, K.; Budescu, M.; Burton-Pye, B.; Campeanu, S.; Cheng, H.; Codrington, N.;			
10 11	Collett, J.; Davis, D.; Dumais, S.; Ebersole, S.; Evanson, L.; Fakhouri, S.; Farrell, R.; Fera, J.; Finger, R.; Gonzalez Castillo, R.; Hattori, T.; Hyman, D.; Jerry, C.; Johnney, L.; Kamara, M.; Kolade, B.;			
12	Lemons, D.; Loscocco, P.; Luerssen, A.; Machado, E.; Mahon, J.; Maney, B.; Marianetti, M.; Markens,			
13	S.; Mazza, C.; McCabe, J.; McKenna, C.; McNeil, C.; Mellen, A.; Mills, P.; Morales, A.; Moreno, Q.;			
14	Murphy, B.; Muturia, F.; Nunez-Torres, A.; Nwosu, P.; Olumuyide, E.; Ouedraogo, R.; Phillips, M.;			
15	Prince, P.; Rice, A.; Rodriguez-Allie, A.; Rosario, Y.; Rotolo, R.; Sanchez, J.; Sanchez, J.; Sarmiento,			
16 17	R.; Schlesinger, K.; Schwittek, D.; Sisselman, A.; Valentine, R.; Waring, E.; Wynne, B.; Yavuz, D.; Zerphey, N.			
18				
19	Senators Absent: Alimi, A.; Alto, A.; Arias Bueno, M.; Augustus, A.; Bayne, G.; Bazile, S.; Calvet,			
20	L.; Di Bello, M.; Doyran, M.; Fortunato-Tavares, T.; Garcia, N.; Georges, C.; Hernandez, F.; Johnson,			
21 22	M.; Ka, K.; MacKillop, J.; Munch, J.; O'Dowd, M.; Ohmer, S.; Punu, K.; Qian, G.; Quinland, J.; Ramirez, M.; Rinti, R.; Rothman, C.; Spencer, A.; Taveras, J.			
23	Kannez, W., Khu, K., Kounnan, C., Spencer, A., Taveras, J.			
24	The meeting was called to order by President Daniel Lemons at 3:36 p.m.			
25				
26	1. Approval of the Minutes			
27	The minutes of the November 6, 2019 Senate meeting were approved by unanimous voice vote.			
28				
29	2. Announcements and Communications			
30	a. Report of the President—			
31	a. Report of the President—			
32	Dr. Lemons thanked everyone who participated in Lehman's Giving Tuesday and announced			
33	that, on this day of charitable giving, just under \$60,000 was raised in support of students			
34	and the College's mission-critical services-a sum which eclipsed the prior year's total of			
35	\$42, 000. Dr. Lemons gave a special thanks to the Director of Advancement Initiatives, Tara			
36	Registe-Tomlinson, and the Associate Director of Alumni Engagement and Annual Fund,			
37	Robert Pagan, for their efforts in helping to organize a successful campaign. He also shared			
38	his sentiments on the importance of coming together for charitable causes and urged all to			
39	participate in the upcoming annual fund drive.			

40Dr. Lemons paid mention to a book launch fundraising event last month, which was attended41by Assemblyman Jeff Dinowitz. The event celebrated the writing of Lehman College42students from a collection that had been recently published, entitled *Our Words Have Power*,43which showcased stories of resilience, strength, and beauty. He explained that it raised44money for the Lehman College Food Bank and the Aissetou Cisse Scholarship for45Undocumented Students. He urged all to read its contents and thanked the Associate Director46of Campus Life, Suzette Ramsundar, for leading the project.

47

48 Dr. Lemons informed that congress passed the Fostering Undergraduate Talent by Unlocking 49 Resources for Education (FUTURE) Act, which extended permanent funding in the amount 50 of \$255 million to historically black colleges and universities (HBCUs), predominantly black 51 institutions (PBIs), tribal colleges and universities (TCUs), and other minority servicing 52 institutions (MSIs). Dr. Lemons went on to inform that the Act would allow the Department 53 of Education to access tax data directly from the Internal Revenue Service (IRS), which 54 would help to eliminate up to 17 questions on the Free Application for Federal Student Aid 55 (FAFSA) and promote speedy verification. Dr. Lemons further explained that the Act would 56 benefit nearly 6 million students, including those at Hispanic-Serving Institutions (HSIs) of 57 which includes Lehman College.

58

59 Dr. Lemons briefed on several informational items. He informed that earlier in the day, he 60 attended an annual conference of the Middle States Commission on Higher Education 61 (MSCHE), in which a member of the U.S. Department of Education discussed changes to the accreditation process; more precisely, that there would no longer be a regional accrediting 62 63 body and that there would be an emphasis on reducing the bureaucratic load. Dr. Lemons 64 also announced that the PSC-CUNY collective bargaining agreement would be presented to 65 the CUNY Board of Trustees for approval next week. He went on to inform of a hearing that 66 took place concerning the budget for fiscal year 2021, where students voiced their 67 frustrations concerning the increase in tuition and fees; Dr. Lemons acknowledged such as 68 verified concerns and assured that the College would do everything possible to ensure that 69 Lehman is more affordable to students.

70

71 Dr. Lemons informed of two personnel transitions. He announced that the Interim Vice 72 Provost for Academic Programs, Vincent Prohaska, would be leaving his position to become 73 the College's Director of Assessment and Senior Faculty Advisor to the Provost. Dr. Lemons 74 expressed his high regard for Dr. Prohaska as well as the work he had accomplished. 75 Furthermore, Dr. Lemons shared that Dr. Prohaska was a wonderful advisor and would 76 continue to be in his new role moving forward; he asked all to join in a round of applause 77 and applause was given. Dr. Lemons moved on to announce that the Academic Affairs Chief 78 of Staff, Melissa Kirk, would be stepping down to become the Assistant Vice Chancellor for 79 Antioch University in New Hampshire. Dr. Lemons expressed that he was saddened to see 80 her go, but shared that he was confident Dr. Kirk would thrive in her new role and wished 81 her well.

83 Dr. Lemons mentioned several accomplishments of note. He informed that the U.S. News & 84 World Report ranked Lehman College as first in the North East for having the lowest student 85 debt at graduation. He also informed that the bid for the new \$75 million Nursing Building 86 was awarded, and that another \$3 million had been sought from the New York City Council 87 to equip the building. Additionally, he shared that student Emeka Mbazor, a Lehman College 88 senior and Computer Science major, led a two-person team at the Lyft Data Challenge, which 89 included City Tech student, Harpreet Gaur; the two were ranked among the top 4 teams and 90 were the only students representing CUNY. Dr. Lemons also shared that Lehman remained 91 ranked as having the fourth highest mobility rate in the country.

92

93

82

b. Student Legislative Assembly—

94 Mr. Jose Acevedo reminded all of the initiatives advocated by student senators at the 95 beginning of the fall semester and of the accomplishments that followed. He referred to the 96 initiative for longer library hours, which he reiterated was a success as students were able to 97 study at the Library until the midnight hour. Mr. Acevedo went on to remind all of the 98 initiative to obtain menstrual hygiene products in student restrooms, which he shared, was 99 also a success as students were able to find a solution; he informed that further information 100 would be provided in the spring. Additionally, Mr. Acevedo brought up the initiative of 101 student representation at department meetings. He informed that the matter was ongoing and 102 would be discussed with the Governance Committee in order to fine-tune the rules and

103	procedures. Mr. Acevedo expressed that such was also a victory for students as additional
104	representation would lead to greater understanding.
105	
106	Mr. Acevedo brought to the attention of the Senate the issue of free hours. He informed that
107	many students found the matter to be an ongoing issue that requires a quick resolve. Mr.
108	Acevedo expressed that the College has long since struggled to provide classroom
109	availability as well as time for free hours, and he stressed the importance of finding a
110	solution.
111	
112	<u>REPORTS OF STANDING COMMITTEES</u>
113	
114	1. Graduate Studies
115	Professor Janet DeSimone presented proposals for curriculum changes in the following departments:
116	Earth, Environmental, and Geospatial Sciences; Biological Sciences; and Middle and High School
117	Education. All proposals were approved by unanimous voice vote.
118	
119	See Attachment I
120	
121	The next meeting was scheduled for Wednesday, February 5, 2020 at 11:00 a.m. in CA B33A.
122	
123	2. Governance Committee
124	Professor Joseph Fera discussed several informational items. He briefed on the outcome of the
125	information session hosted by the Governance Committee, which was offered to chairs of the Senate
126	Standing Committees, and thanked all committee chairs for their participation. Prof. Fera also
127	informed of the ongoing process for revisions to the Senate bylaws and governance documents,
128	which he explained would be overseen by the Senate Parliamentarian, Prof. Duane Tananbaum; he
129	added that additional updates would be brought to the attention of the Senate in the spring. Prof.
130	Fera went on to provide a follow up on the Collaborative on Academic Careers in Higher Education
131	(COACHE) survey, for which he provided the recommendations from the COACHE Survey
132	Committee.
133	
134	See Attachment II

135

136

The next meeting was scheduled for Thursday, January 23, 2020 at 1:00 p.m. in SH 336.

137

138 **3. Committee on Admissions, Evaluations and Academic Standards**

Professor Linda Sheetz presented the list of graduate and undergraduate degree candidates for approval, which was contingent upon each candidate's completion of the requirements for graduation. Prof. Sheetz proceeded to a vote to approve the list; all graduate and undergraduate degree candidates were approved by unanimous voice vote.

143

144 Prof. Sheetz reported on the resolution of the committee's subcommittee, which was tasked with 145 reviewing the College's admissions criteria and the outcomes of different admissions groups to 146 determine the best predictors of student success. It was pointed out from the floor that the fourth 147 bullet point, which discussed a concern about student performance, was not a recommendation, but 148 a comment; a request was made to rephrase the paragraph. The Parliamentarian, Professor Duane 149 Tananbaum, proposed that the paragraph be moved to the "whereas" section of the document and it 150 was agreed. Professor Joseph Fera made a motion to amend the language of the fourth bullet point, 151 specifically requesting that the second sentence be removed. The motion was seconded and a 152 discussion ensued; the amendment was approved by unanimous voice vote. Dean Elin Waring made 153 a motion to amend the resolution, in which she requested that the fourth bullet point be removed 154 entirely. The motion was seconded and a discussion followed. Prof. Sheetz proceeded to a vote, 155 which was approved by majority voice vote with one opposed.

156

157 Prof. Sheetz presented a proposal to change admissions criteria bands for freshmen, so that an 158 emphasis is placed on high school college academic average as opposed to SAT scores. She 159 proceeded to a vote and the proposal was approved by unanimous voice vote.

160

Prof. Sheetz presented a proposal for a curriculum change to the policy on Spanish heritage speakers and foreign transfer students. There were many concerns voiced by students and faculty regarding placement discrepancies. Some students pointed out that what may be taught or learned at home may not equate to the formal education one would receive at the College. Others voiced their own personal struggles at Lehman as students who were incorrectly placed into higher level courses,

166	despite having had difficulties with reading, writing, or speaking the language. There was a motion
167	to table the proposal and to return it to the department for discussion. The motion was seconded and
168	approved by unanimous voice vote. The Parliamentarian, Duane Tananbaum, informed that the Dean
169	would convey the tenor of the discussion to the Department as well as ensure that students are
170	involved in the discussion.
171	
172	Prof. Sheetz announced that Prof. Sandra Campeanu was elected chair of the Committee on
173	Admissions, Evaluations and Academic Standards (CAEAS), and informed that Prof. Campeau
174	would serve in this role at the start of spring 2020 semester.
175	
176	See Attachment III
177	
178	4. Undergraduate Curriculum
179	Professor Lynn Rosenberg presented proposals for curriculum changes in the following departments:
180	Anthropology; Biological Sciences; Chemistry; Health Sciences; Music, Multimedia, Theatre &
181	Dance; and Sociology. Prof. Rosenberg also presented proposals from the Undergraduate
182	Curriculum Committee. All presented proposals were approved by unanimous voice vote.
183	
184	See Attachment IV
185	
186	The next meeting was scheduled for Wednesday, February 5, 2020 at 1:00 p.m. in SC 1405A.
187	
188	5. Academic Freedom:
189	There was no report.
190	
191	6. Library, Technology, and Telecommunication
192	Mr. Steven Castellano presented the report and brought announcements from the Library, Division
193	of Information Technology, Online Education, and concerning Blackboard.
194	
195	See Attachment V
196	
197	The next meeting was scheduled for Wednesday, January 29, 2020 at 11:00 a.m.

198	
199	7. Campus Life and Facilities
200	There was no report.
201	
202	The next meeting was scheduled for Wednesday, February 5, 2020 at 2:00 p.m. in SH 018.
203	
204	8. Budget and Long-Range Planning
205	Professor Haiping Cheng presented the report of the Joint Committee of Senate and FP&B Budget
206	and Long Range Planning. He discussed several matters that were touched on by Academic Affairs
207	and on matters that involved the budget. He noted that as the College would be pending the outcome
208	of the PSC-CUNY contract, a first quarter update of the budget for fiscal year 2020 would instead
209	be presented to the Senate sometime in the spring. Prof. Cheng went on to provide a breakdown of
210	long-term personnel trends from 2017 through 2020.
211	
212	See Attachment VI
213	
214	The next meeting was scheduled for Wednesday, February 26, 2020 at 1:30 p.m. in SH 336.
215	
216	9. University Faculty Senate Report
217	There was no report.
218	
219	The next Plenary Session was scheduled at CUNY Central for Tuesday, February 18, 2020 at 6:30
220	p.m. in room 0819.
221	
222	4. <u>Report of Ad Hoc Committee</u>
223	a. Report of the Academic Assessment Council—
224	The Interim Vice Provost, Dr. Vincent Prohaska, provided an overview of the mission of the
225	Academic Assessment Council and offered a timeline of the committee's progress since its first
226	meeting on March 21, 2019. He also briefed on the College's annual assessment cycle and went
227	on to discuss the importance of assessment from the ground up, or from student learning
228	objectives to institutional learning domains, which he explained were necessary cornerstones
229	for achieving the College's vision of student success and academic excellence.

230	
231	See Attachment VII
232 233 234 235	<u>Old Business</u> None. <u>New Business</u> None.
236 237	ADJOURNMENT
238	President Lemons adjourned the meeting at 5:28 p.m.
239	
240	Respectfully submitted:
241	
242	Cynthia Cessant



GOVERNANCE COMMITTEE Senate Report December 11th, 2019

- Senate Standing Committees Chairs Info Session
 - Met on November 6th to review Senate ByLaws and share best practices
 - Open and productive meeting
 - Thank you to all committee chairs
- Senate ByLaws and Governance Documents Revisions
 - Ongoing process spearheaded by Duane Tananbaum
 - Hope to bring changes by end of Spring term
- COACHE Survey Follow Up
 - o COACHE is a faculty satisfaction survey taken by full-time faculty in Spring 2019
 - o Survey results reviewed by working group of the General Faculty
 - Senate involvement requested re: Facilities and Work Resources (see attached, item 2)
 - Sherry Deckman (COACHE working group co-chair) and Jennifer Collett (chair of Campus Life & Facilities) present at last Governance Committee meeting.
- Next Governance Committee Meeting is ______.



Recommendations to the Lehman College President, Provost and Executive Committee of the Faculty, from the COACHE Survey Committee (DRAFT, 11/1/2019)

Based on analysis of results of the 2019 COACHE Survey, the Committee has articulated four starting recommendations to address areas of challenge and capitalize on strengths. Additional recommendations may follow as the Committee continues to analyze the results. We have framed these recommendations as actions for 45-day Task Forces. We have provided suggestions on how to develop the Task Forces, highlighted areas of greatest need according to our interpretation of the data, and formulated a plan for Task Force accountability and reporting.

1. Mentoring: Institutionalizing a pipeline to faculty success

Mentoring scores across all categories, including Associate Professors, Faculty of Color, and Women Faculty, have not only dropped since the previous implementation of the COACHE SURVEY in 2015, but also have fallen into the lowest 30% category, in relation to comparable institutions. Because mentoring is intimately linked to faculty satisfaction and success, institutionalizing a pipeline promoting faculty satisfaction and success at all levels is a top priority.

As a result, we recommend that the Provost and Faculty Executive Committee appoint a 45-Day Task Force to develop a plan to institutionalize a systematic approach to productive mentoring at all levels. We recommend that the committee be formed by mid-December 2019, that work begin in early February 2020, and that a plan be reported to the COACHE Committee by mid-March. The COACHE Committee will be responsible for disseminating findings, plans and recommendations to the President, Provost and college community.

2. Facilities and Work Resources: Systematizing support to achieve pedagogical excellence Scores on the 2019 COACHE Survey indicate that faculty satisfaction with Facilities and Work Resources, specifically in the areas of Classrooms, Equipment and Clerical and Administrative support, have dropped significantly. Excellence in pedagogical practice requires that facilities and work resources meet basic needs such as relevance and usability. Classrooms need to be safe, well lit, and climate-controlled, and outfitted with up-to-date and functioning equipment. Departments need clerical and administrative support to manage these basic needs.

We recommend that the Lehman College Senate Campus Life and Facilities Committee develop a plan to address areas of need identified in the COACHE survey, and improve faculty satisfaction with facilities and work resources both practical and supportive. Surveys or focus groups might be used to collect additional data to deepen understanding about the specifics of faculty dissatisfaction within those areas. We recommend that the committee report to the COACHE Committee by mid-March, 2020 on their findings and plans. The COACHE Committee will be responsible for disseminating findings, plans and recommendations to the President, Provost and college community, although the Campus Life and Facilities committee might wish to provide its own report(s) to the Senate.

3. Tenure Expectations and Tenure Policies: Promoting trust and success

Trusting that promotion and tenure processes and policies promote faculty satisfaction and success across disciplines is a key component of faculty satisfaction. COACHE Survey 2019 scores in the Tenure Expectations and Tenure Policies categories indicate that Lehman faculty at all levels are less satisfied with existing tenure and promotion processes than they were in 2015, when these areas were first highlighted as needing improvement. While some steps have been taken, more needs to be done.

As a result, the COACHE Committee recommends that the F P & B build on efforts already underway to minimize confusion in tenure and promotion processes and policies across disciplines. We recommend that the FP&B reports to the COACHE Committee by mid-March. The COACHE Committee will be responsible for disseminating findings, plans and recommendations to the President, Provost and college community.

4. Campus Climate Survey: Moving beyond the limitations of COACHE

Significantly, the 2019 COACHE Survey only addressed job satisfaction among full-time faculty, excluding part-time faculty, and administrative and clerical staff from the process, despite their comprising the greatest number of Lehman College employees and providing essential contributions to the college. Because the college is committed to inclusivity at all levels and believes that it is a key component of satisfaction and success, the concerns and voices of all members of our community need to be heard and taken into account.

As a result, the COACHE Committee recommends that members of the Lehman College Strategic Planning Committee form a 45-Day Task Force drawing from its Faculty and Staff Success and Diversity and Inclusion sub-committees to implement a Campus Climate Survey in order to assess job satisfaction among part-time, administrative and clerical staff, and articulate recommendations to address areas of concern. This recommendation echoes one made in the recent MSCHE self-study document. The COACHE Committee recommends that the Task Force be formed by December 15th, 2019, begin work in early February 2020, complete work within 45 days, and report to the COACHE Committee by mid-March 2020. The COACHE Committee will be responsible for disseminating findings, plans and recommendations to the President, Provost and college community.

Senate Meeting, December 11, 2019

Committee on Admissions, Evaluation and Academic Standards (CAEAS)

The CAEAS recommends confirming the lists of undergraduate and graduate candidates for graduation pending completion of all requirements.

Approved by CAEAS on 11-20-19

Submitted to Senate on 11-26-19

Lehman College Senate

RESOLUTION TO ADOPT THE RECOMMENDATIONS OF THE COMMITTEE ON ADMISSIONS, EVALUATIONS AND ACADEMIC STANDARDS SUBCOMMITTEE

WHEREAS, the subcommittee was formed to look at admissions criteria being used and specifically the outcomes of different admissions groups; and

WHEREAS, the subcommittee performed statistical analyses to generally determine best predictors of student success and to compare the outcomes of different admissions groups for three semesters;

NOW, THEREFORE BE IT RESOLVED that the Lehman College Senate adopts the following recommendations of the CAEAS subcommittee:

- Admissions should be approached in a more data-informed way and the Regular admit category should better reflect indicators of success. Distributions of variables and regression models of the Regular Admit group and the OSS group showed much overlap. Based on this overlap, and if we can refine a more predictive admission formula for regular admit students, this designation (OSS) should be used less in future years.
- There should be a cap on the OSS cohort; an enrollment cap of 10% of the previous year's total enrolled students is recommended, in consultation with CAEAS and enrollment management.
- Admissions criteria, in general, should rely less on SAT scores, which do not seem to be a strong predictor of success.
- There is some concern that students who are performing worse (e.g., OSS) than others (i.e., Regular admits) might not be able to complete certain majors, such as nursing. For example, the majority of OSS students were placed in MAT104, while the most Regular admit students were placed in MAT132.
- There should be ongoing tracking of the cohort for 6 years, to determine graduation outcomes for the different groups.

Approved by CAEAS on 11-20-19

Freshman Admission Criteria Proposal for Lehman Senate

We are proposing a change in the admission criteria bands for freshmen which will place more emphasis on the high school CAA (College Academic Average) than on the SAT scores. Our current admission bands weigh the SAT scores more heavily than the CAA. Students in the Bronx are being denied access to the College because they do not perform well on these standardized tests. Being the only CUNY senior college in the Bronx, we believe it is essential to provide more access to the students in this borough, while still ensuring that they perform well academically while at Lehman. Studies done by CUNY (Koretz et al.,2016) as well a research done by Professor Kevin Sailor at Lehman have shown that a student's high school average is a better predictor of college success than SAT scores.

The tables below show Lehman's current admission bands including CAA and SATs and the proposed bands for fall 2020. When looking at the fall 2018 data, the proposed change would have decreased the SAT score by 20 points but had no impact on the CAA.

Band	Minimum CAA	Minimum NEW SAT	Minimum Old SAT	Max Old SAT
1	>= 85	>= 1000 < 1020	920	940
2	>= 83	>= 1020 < 1220	950	1140
3	>= 80	>= 1220	>= 1150	
4	>= 78 < 80	> 1220	> 1150	

Current Admission Bands

Proposed Admission Bands for fall 2020

Band	Minimum CAA	Max CAA<	Minimum NEWSAT	Minimum Old SAT
1	80.0	81.25	1150	1100
2	81.25	82.5	1070	1020
3	82.5	83.75	1000	950
4	83.75		930	880

Highlights of Proposed Admissions Standards:

• The proposed model effectively "flips" the CAA percentile with the SAT percentile changing admission criteria weight from the SAT exam to the CAA in support of the literature on this topic.

- The proposed admission bands have little impact on CAA or SAT average of the admitted student population.
- It is estimated that admitted students under the new model will perform as well as students admitted in the old model.
- The college would have admitted approximately 1000 additional students for the fall 2018 semester by using the proposed data set.

Approved by CAEAS on 11-20-19

COMMITTEE ON ADMISSIONS, EVALUATION AND ACADEMIC STANDARDS

CURRICULUM CHANGE

1. Type of Change: Policy on Heritage and Foreign Transfer Students - TABLED

- 2. From: Strikethrough the changes
- 3. To: Underline the changes

Foreign Language Requirement for Students with Preexisting Foreign Language Skills

In general, students who began a language in high school or elsewhere and plan to continue the study of that language must take the placement test. Students are urged to take the placement test the semester prior to starting foreign language study. The test may be taken according to the schedule posted by the Department of Languages and Literatures. Please contact the Department of Languages & Literatures (Carman Hall, Room 257, telephone 718.960.8215) to schedule your placement exam. The test may be taken only once and the result is binding. Results are generally posted within a week after taking the test.

- In general, students who have taken a language in High School will not be allowed to take the equivalent course at Lehman unless they are placed there by the Department.
- <u>Students who have begun a language at another college will not be permitted to</u> take an equivalent course for credit.
- <u>Students may take equivalent foreign language courses for credit at other CUNY</u> <u>colleges through ePermit (Lehman ePermit, also https://epermit.cuny.edu) or at</u> <u>non-CUNY colleges (visit the Registrar's office for a non-CUNY permit).</u>

Only students who transfer into Lehman with an associate's degree are exempt from the Foreign Language Requirement.

Spanish Heritage Speakers

Spanish heritage speakers are those who speak Spanish at home. Often this is their first language and mastery of the language in both spoken and written forms varies considerably. Spanish heritage speakers cannot take language courses in their home or native language intended for non-heritage speakers (courses numbered 111, 112, 201, 202). Spanish heritage speakers will be placed by examination and/or interview with a Languages Department advisor. There are special courses for Spanish heritage speakers (SPA 113-114 and SPA 203-204).

Foreign Transfer Students

Foreign transfer students often enter Lehman with college credit for coursework completed in a language other than English. Foreign transfer students cannot take language courses in their home or native language (courses numbered 111, 112, 201, 202). Foreign students will be placed by examination and/or interview with a Languages Department advisor.

Foreign transfer students who have completed college coursework in a foreign language may request a waiver from taking a foreign language. If the waiver is granted, the student is required to substitute Foreign Language Option courses to complete the language requirement (click here for the Foreign Language Option courses).

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

Although the college website contains information on this topic, there is no policy statement in the bulletin.

5. Date of CAEAS approval: November 20, 2019

Senate Meeting – December 11, 2019

Proposed Graduate Studies Report

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

Department of Earth, Environmental and Geospatial Sciences

• Course changes: GEP 606

Department of Biological Sciences

- Change in program description: BS/MS, Dual Biology Degree
- Course changes: BIO 611, 70602, 762, 76201, 646, 76403, 7933, 810,

Department of Middle and High School Education

- New Certificate Program: Human Rights and Transformative Justice
- Change in degree requirements: MSEd, Science Education (Sequence 3; Trans B Sequence)
- New courses: ESC 712, 715, 716, 538, 539

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

Our next meeting is on February 5, 2020, at 11 a.m. in Carman B33A.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: Biology B.S./M.S., Dual Degree Hegis Number: 0401.00 Program Code: 35447 Effective Term: Spring 2021

1. Type of Change: Change in Program Description

2. <u>From</u>: Five Year Combined B.S./M.S. Dual Biology Degree

The Five-Year Biology B.S./M.S. degree offers qualified students the opportunity to earn both a Bachelor of Science and a Master of Science degree in Biology, which may be completed in as little as five years.

(Years 1-4) 120-credit B.S. in Biological Sciences. Winter and Summer Sessions must be used. BIO 489 must be taken twice and BIO 490 should be taken in the senior year.

(Years 1-2) Students must take the biology, math, chemistry, and physics prerequisites.

(Year 3) Research advisor chosen in Spring term.

(Year 4) Three M.S. courses taken for credit in both degrees (12 credits total). Must take BIO 489 in the Fall and BIO 489 and BIO 490 in the Spring. Graduation in June with Honors, having completed a research project under faculty sponsor.

(Year 5) Enrolled in M.S. program in thesis track (30 course credits, 12 of which are satisfied in Year 4). BIO 7991, and 7992 with possibility of BIO 7993. Defense of thesis and graduation by September 1.

30-32 M.S. Credits to be distributed as follows:

Students must take three M.S. courses in Year 4 (12 credits).

For example: BIO 634: Cell Biology and Electron Microscopy (4 credits).

Students must take three to four M.S. courses in Year 5 (12-14 credits).

For example: three thesis research courses (6 credits).

Note 1: This program will allow students to finish 1-2 years earlier than they would if they did a separate B.S. followed by a M.S. Additionally, this program provides students with extensive research experience, which will make them more competitive for jobs, doctoral programs and medical programs.

Note 2: To be eligible for the fifth-year program, all students must demonstrate an interest in, achievement in, or affinity for biology. This will be determined by having a minimum of 48 semester hours of mathematics and sciences study, including MAT 175 with a GPA of 3.0. Candidates must apply to the program no later than the first semester of their junior year and may apply as early as the second semester of their sophomore year.

The accelerated pace of this program is made possible by offering qualified students the opportunity to take masters level courses during their final year of undergraduate work. Students qualify by demonstrated attainment of a GPA of 3.0 in mathematics and science coursework as well as a GPA of 3.25 in the major through the first three years of study, and by completing all of the necessary prerequisites for those courses, which will ensure that they are prepared for graduate-level work

3. <u>To:</u> Five Year Combined B.S./M.S. Dual Biology Degree

The Five-Year Biology B.S./M.S. <u>is a single</u> degree <u>that</u> offers qualified students the opportunity to earn both a Bachelor of Science and a Master of Science degree in Biology, which may be completed in as little as five years.

(Years 1-4) 120-credit B.S. in Biological Sciences. Winter and Summer Sessions must be used. BIO 489 must be taken twice and BIO 490 should be taken in the senior year.

(Years 1-2) Students must take the biology, math, chemistry, and physics prerequisites.

(Year 3) Research advisor chosen in Spring term.

(Year 4) Three M.S. courses taken for credit in both degrees (12 credits total). Must take BIO 489 in the Fall and BIO 489 and BIO 490 in the Spring.

(Year 5) Enrolled in M.S. program in thesis track (30 course credits, 12 of which are satisfied in Year 4). BIO 7991, and 7992 with possibility of BIO 7993. Defense of thesis and graduation by September 1.

30-32 M.S. Credits to be distributed as follows:

Students must take three M.S. courses in Year 4 (12 credits).

For example: BIO 634: Cell Biology and Electron Microscopy (4 credits).

Students must take three to four M.S. courses in Year 5 (12-14 credits).

For example: three thesis research courses (6 credits).

Note 1: This program will allow students to finish 1-2 years earlier than they would if they did a separate B.S. followed by a M.S. Additionally, this program provides students with extensive research experience, which will make them more competitive for jobs, doctoral programs and medical programs.

Note 2: To be eligible for the fifth-year program, all students must demonstrate an interest in, achievement in, or affinity for biology. This will be determined by having a minimum of 48 semester hours of mathematics and sciences study, including MAT 175 with a GPA of 3.0. Candidates must apply to the program no later than the first semester of their junior year and may apply as early as the second semester of their sophomore year.

The accelerated pace of this program is made possible by offering qualified students the opportunity to take masters level courses during their final year of undergraduate work. Students qualify by demonstrated attainment of a GPA of 3.0 in mathematics and science coursework as well as a GPA of 3.25 in the major through the first three years of study, and by completing all of the necessary prerequisites for those courses, which will ensure that they are prepared for graduate-level work.

4. Rationale:

We are correcting the description of the program to avoid confusions about the number of degrees students will earn. The previous description indicated that students were entitled to graduating twice and receiving two separate degrees, one for completing the BS degree and a second one for completing the MS degree. The revised description clarifies that students would receive a single BS/MS degree.

5. Date of departmental approval: September 18, 2019

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: Course description and hours

2. From:

2. <u>110m</u> .			
Department(s)	Biological Sciences		
Career	[] Undergraduate [X] Graduate		
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial		
Subject Area	Biology		
Course Prefix &	BIO 611		
Number			
Course Title	Problems in Microbiology		
Description (For students who are teaching or plan to teach science or bid in secondary schools.) Reading and projects based on recent developments in microbial cytology, growth, metabolism, varia and dissociation, host/parasite relations, antibiosis, and other associations, e.g., with studies taken from bacteria, fungi, and viruses. Notes: 3 credits with lab			
Pre/ Co	One course in bacteriology or microbiology, one year of college		
Requisites	chemistry, and one year of college physics.		
Credits	3		
Hours			
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		

3. <u>To:</u>			
Department(s)	Biological Sciences		
Career	[] Undergraduate [X] Graduate		
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial		
Level			
Subject Area	Biology		
Course Prefix	BIO 611		
& Number			
Course Title	Problems in Microbiology		
Description	(For students who are teaching or plan to teach science or biology in secondary schools.) Reading and projects based on recent developments in microbial cytology, growth, metabolism, variation and dissociation, host/parasite relations, antibiosis, and other associations, e.g., with studies taken from bacteria, fungi, and viruses. (Includes lab hours.)		
Pre/ Co	One course in bacteriology or microbiology, one year of college		
Requisites	chemistry, and one year of college physics.		
Credits	3		
Hours	3		
Liberal Arts	[X] Yes [] No		
Course 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. Rationale:

The course hours are not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this. Also, a minor change was made in the description to clarify the required lab hours.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course description

2. From:

Department(s)	Biological Sciences			
Career	[] Undergraduate [X] Graduate			
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial			
Level				
Subject Area	Biology			
Course Prefix	BIO 70602			
& Number				
Course Title	Plant Systematics: Laboratory			
Description	Notes: Ph.D. Level Courses in Biology			
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			
	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	[] Undergraduate [X] Graduate		
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial		
Level			
Subject Area	Biology		
Course Prefix	BIO 70602		
& Number			
Course Title	Plant Systematics: Laboratory		
Description	Laboratory for exploring the evolutionary history of plant life and plant		
	classification.		
	Notes: Ph.D. Level Courses in Biology		
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		

4. Rationale

The course description is not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course description and hours

2. From:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 762
& Number	
Course Title	Physiological Ecology: Lecture
Description	
Pre/ Co	NA
Requisites	
Credits	3
Hours	
Liberal Arts	[X] Yes [] No
Course Attribute (e.g.	NA
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	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 762
& Number	
Course Title	Physiological Ecology: Lecture
Description	Study of the organisms behavioral and physiological adjustments for
	survival and reproduction in response to changes in the ecosystem.
Pre/ Co	NA
Requisites	
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V. Nat Applicable
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. Rationale:

The course description and hours are not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course description and hours

2. From:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76201
& Number	
Course Title	Physiological Ecology: Laboratory
Description	
Pre/ Co	NA
Requisites	
Credits	3
Hours	
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	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76201
& Number	
Course Title	Physiological Ecology: Laboratory
Description	Practical explorations of organisms' adjustments in response to
	environmental changes in the ecosystem.
Pre/ Co	NA
Requisites	
Credits	3
Hours	<u>6</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

4. Rationale:

The course description and hours are not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course description

2. From:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 646
Course Title	Statistics for Biological Research
Description	Biostatistical principles and methods for experimental biologists. Statistical planning of experiments, collection of data, randomization, elementary factorial analyses, analysis of variation, and regression.
Pre/ Co Requisites	NA
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 Science Vorld Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

3. <u>To</u> :	
Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 646
& Number	
Course Title	Statistics for Biological Research
Description	Statistical data analysis and graphical visualization by computer
	programming in R.
Pre/ Co	NA
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

4. Rationale:

The course description is revised to highlight the computer programming and data analysis skills that students will be learning in the course.

____ Scientific World

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course description and hours

2. From:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76403
& Number	
Course Title	Plant Ecology: Lecture
Description	
Pre/ Co	NA
Requisites	
Credits	3
Hours	
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

3. <u>To</u>:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76403
& Number	
Course Title	Plant Ecology: Lecture
Description	Study of plants distribution and abundance, plants interactions with
	other plants and other organisms, and plants responses to
	environmental pressures.
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	X_Not Applicable Required
Component	Required English Composition
Component	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. Rationale:

The course description and hours are not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course hours and description

2. From:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 7933
& Number	
Course Title	Seminar in Special Topics
Description	
Pre/ Co	NA
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>:

3. 10.	
Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 7933
& Number	
Course Title	Seminar in Special Topics
Description	Advanced and in-depth studies of specialized topics in biology.
Pre/ Co	NA
Requisites	
Credits	2
Hours	2
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
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

4. Rationale:

The course description and hours are not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this.

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. <u>Type of Change</u>: Course description and hours

2. From:

Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 810
Course Title	Seminar in Biochemistry
Description	Required of all students.
Pre/ Co Requisites	NA
Credits	1
Hours	
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>:

<u> </u>	
Department(s)	Biological Sciences
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 810
& Number	
Course Title	Seminar in Biochemistry
Description	Advanced and in-depth discussions of biochemical research.
Pre/ Co	NA
Requisites	
Credits	1
Hours	1
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
	Creative Expression
	Individual and Society
	Scientific World

4. Rationale:

The correct course description and hours are not included in the graduate bulletin and/or CUNYfirst, so this proposal corrects this.

5. Date of departmental approval: October 23, 2019

DEPARTMENT OF EARTH, ENVIRONMENTAL AND GEOSPATIAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: Prerequisite

2. From:

Earth, Environmental and Geospatial Sciences
[] Undergraduate [x] Graduate
[x] Regular [] Compensatory [] Developmental [] Remedial
Physical Geography
GEP 606
Raster Analysis
Focusing on the structure and the various ways in which raster data can be created, modified, and analyzed using a Geographic Information System (GIS). Topics include surface analysis, multi-criteria/multi- objective evaluation, and map algebra. The course combines lectures with weekly laboratory exercises designed to apply the concepts from the lectures and to develop students' expertise with GIS processing software.
PREREQ: GEP 205 or instructor's permission.
3
4
[x] Yes [] No
NA
x_ Not Applicable
Required
English Composition Mathematics
Science
Flexible
World Cultures
US Experience in its Diversity
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Creative Expression
Creative Expression Individual and Society

Scientific World

3. <u>To</u> :	
Department(s)	Earth, Environmental and Geospatial Sciences
Career	[] Undergraduate [x] Graduate
Academic	[x] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Physical Geography
Course Prefix	GEP 606
& Number	
Course Title	Raster Analysis
Description	Focusing on the structure and the various ways in which raster data can be created, modified, and analyzed using a Geographic Information System (GIS). Topics include surface analysis, multi-criteria/multi- objective evaluation, and map algebra. The course combines lectures with weekly laboratory exercises designed to apply the concepts from the lectures and to develop students' expertise with GIS processing software.
Pre/ Co	PREREQ: <u>GEP 505</u> or instructor's permission.
Requisites	
Credits	3
Hours	4
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</u>: The graduate bulletin and CUNYfirst erroneously list GEP 205 as the prerequisite for this course. This proposal corrects the error.

5. Date of departmental approval: October 23, 2019

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

Name of Program and Degree Award: Human Rights Education and Transformative Justice Certificate Program Proposed HEGIS Number: 0821.00 Program Code: TBD Effective Term: Spring 2021

- 1. Type of Change: New Certificate Program
- 2. From: N/A

3. <u>To</u>:

Certificate Program in Human Rights Education and Transformative Justice (12 credits)

The Certificate Program in Human Rights Education and Transformative Justice is designed for individuals who have earned a BS or BA or a Master's degree from Lehman College or another accredited institution or for those who are enrolled currently in a graduate degree program at Lehman College. The program supports community building within educational organizations, teaches non-punitive conflict resolution skills, addresses school-to-prison pipeline injustices, strengthens democratic values rooted in universal human rights and respect for human dignity and helps identify and correct structural forms of oppression, including racism, sexism and genderism that create division and disadvantages.

Admissions Requirements:

- 1. A bachelor's or master's degree from an accredited institution.
- 2. Official undergraduate or graduate transcript showing a minimum 3.0 GPA.
- 3. One letter of recommendation from an employer, faculty or community leader to serve as academic and/or character reference.
- 4. An essay that explains interest in pursuing this area of study and future career plans.

Program of Study: The program of study consists of the following 12 credits of core courses:

Existing Course:

ESC 713 Restorative Practices and Restorative Justice (3 credits.): Knowledge, skills, and abilities needed to incorporate restorative practices (creating safe and healthy learning communities) and restorative justice (constructively addressing conflict,

harm and injury) in diverse school settings and neighborhoods in collaboration with community organizations and government agencies.

New Courses:

ESC 712 Human Rights Education (3 credits): Introduction to human rights education as a field of scholarship and educational practice. Examination of debates and key ideas that underpin the field of human rights, specifically as they apply to the conceptualization and practice of human rights education.

ESC 715 Nonviolent Resolution of Conflict (3 credits): Theoretical knowledge and educational practice needed to incorporate conflict resolution principles and practices of nonviolent resolution of conflict into diverse educational K-12 settings and neighborhoods and in collaboration with community organizations and government agencies.

ESC 716 Transformative Justice (3 credits): Theoretical knowledge and educational practice needed to incorporate principles and practices of transformative justice (addressing structural racism, misogyny, sexual preference and other forms of oppression) in diverse educational K-12 settings and neighborhoods and in collaboration with community organizations and government agencies.

4. Rationale:

Our current need for in-depth nonviolent resolution of conflict and violence rooted in different forms of injustice is evident in our daily lives. There is great need to support and assist, in nonviolent ways, young people trapped in the school-to-prison pipeline, young adults and adults trapped in a justice system that continues to practice mass incarceration, and young people trapped in the international sex trade. For far too long, people of color and the poor have suffered from the lack of adequate protection and care as a result of living without adequate housing, education, employment and health care.

The proposed 12-credit Certificate in Human Rights and Transformative Justice program is intended to support the development of advocacy and leadership knowledge and skills, which are needed by K-12 teachers, school counselors and school administrators; social workers; community and judicial agencies and organizational staff; and to help them become informed social change agents and educators for liberation. The implementation of human rights education helps support the development of new transformative community cultures and cultures within educational organizations, teaches non-punitive conflict resolution skills, addresses school to prison pipeline injustices, strengthens democratic values rooted in universal human rights and respect for human dignity and helps identify and correct structural forms of oppression that create division and disadvantages. This certificate is being developed in collaboration with the Lehman College Center for Human Rights and Peace Studies.

5. Date of Department Approval: April 11, 2019

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

1. Type of change: New Course

2.	
Department(s)	Middle and High School Education
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Education
Course Prefix	ESC 712
& Number	
Course Title	Human Rights Education
Description	Introduction to human rights education as a field of scholarship and educational practice. Examination of debates and key ideas that underpin the field of human rights, specifically as they apply to the conceptualization and practice of human rights education.
Pre/ Co	NA
Requisites	
Credits	3
Hours	3
Liberal Arts	[]Yes [X]No
Course	Writing Extensive
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc) General	X_ Not Applicable
Education	Required
Component	English Composition
Component	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. Rationale:

The majority of students and adults are unfamiliar with the meanings and purposes of human rights. This course addresses this complex need as a field of scholarship and educational practice. Human rights education seeks to address persistent social and educational inequalities and is tailored to local contexts around the globe. This course is required in the proposed certificate in Human Rights Education and Transformative Justice.

4. <u>Learning Outcomes and Sample Syllabus (By the end of the course students</u> will be expected to):

- 1. Develop an understanding of international human rights law;
- 2. Develop the principles and practices of "building a positive learning community" as it applies to the guarantee of individual and collective human rights;
- 3. Sequence activities so as to build trust and caring among children, youth and adults so they become more willing to explore specific human rights and their impact on one's life and the lives of others;
- 4. Sequence activities to build trust and caring among children, youth and adults so they become more willing to take the necessary risks to extend and challenge their learning about human rights both within education environments and within their larger community;
- 5. Examine debates surrounding human rights and culture;
- 6. Plan a sequenced human rights-based service-learning project to be implement in a local community;
- 7. Determine how implicit bias influences how human rights are both interpreted and implemented;
- 8. Contextualize human rights into a culturally responsive curriculum; and
- 9. Revise a restorative justice program to include specifically identified individual human rights.

5. Date of Departmental Approval: April 11, 2019

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

1. Type of change: New Course

2.			
Department(s) Middle and High School Education			
Career	[] Undergraduate [X] Graduate		
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial		
Level			
Subject Area	Education		
Course Prefix	ESC 715		
& Number			
Course Title	Nonviolent Resolution of Conflict		
Description	Theoretical knowledge and educational practice needed to incorporate conflict resolution principles and practices of nonviolent resolution of conflict into diverse educational K-12 settings and neighborhoods and in collaboration with community organizations and government agencies.		
Pre/ Co	NA		
Requisites			
Credits	3		
Hours	3		
Liberal Arts	[]Yes [X]No		
Course Attribute (e.g. Writing Intensive, WAC, etc)	Writing Extensive		
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:

A basic requirement for children, youth and adults to live in peaceful and healthy neighborhoods is to understand and know how to practice nonviolent conflict resolution in its many different forms. However, research clearly indicates these understandings and essential practices are not taught in K-12 schools, higher education institutions or government agencies, and this course is designed to address this critical need. This course is required in the proposed certificate in Human Rights Education and Transformative Justice.

4. <u>Learning Outcomes and Sample Syllabus (By the end of the course students</u> <u>will be expected to)</u>:

- 1. Develop an understanding of the principles and practices of nonviolent conflict resolution as a foundation to create and sustain thriving learning communities;
- Sequence activities to build trust among students so they become more willing to engage in and become proficient applying different forms of nonviolent resolution of conflict;
- Sequence activities to build trust among students so they become more willing to take the necessary risks to extend and challenge their personal and shared learning;
- 4. Introduce and lead different model of different forms of nonviolent resolution;
- 5. Plan sequenced nonviolent resolution essential components for school and community purposes;
- Collaborate as a team with teachers, administrators, students, parents and school staff to implement different forms of nonviolent conflict resolution programs and project;
- 7. Apply nonviolent conflict resolution models in different situations where punitive discipline approaches might have been used in the past;
- 8. Develop an understanding of effective nonviolent forms of communication to support positive classroom discipline and community building;
- 9. Determine how implicit bias is influencing how human rights are both interpreted and implemented;
- 10. Contextualize human rights into a culturally responsive curriculum; and
- 11. Develop an understanding of how the expressive arts can support healing in the nonviolent resolution of conflict.

5. Date of Departmental Approval: April 11, 2019

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

1. Type of change: New Course

2.	
Department(s)	Middle and High School Education
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Education
Course Prefix	ESC 716
& Number	
Course Title	Transformative Justice
Description	Theoretical knowledge and educational practice needed to incorporate principles and practices of transformative justice (addressing structural racism, misogyny, sexual preference and other forms of oppression) in diverse educational K-12 settings and neighborhoods and in collaboration with community organizations and government agencies.
Pre/ Co	NA
Requisites	
Credits	3
Hours	3
Liberal Arts	[] Yes [X] No
Course	Writing Extensive
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

3. Rationale:

A major challenge to the meaningful implementation of human rights and restorative justice practices is the necessary restructuring of the systemic and institutional root causes that maintain racial, gender, sexual and other forms of injustice and oppression. There has been a historical pattern of addressing the different forms of injustice and oppression by focusing at the individual level and ignoring, for example, economic and social causes. Such efforts require the development of collaborative partnerships in which the major stakeholders are involved. This course is required in the proposed certificate in Human Rights Education and Transformative Justice.

4. <u>Learning Outcomes and Sample Syllabus (By the end of the course students</u> will be expected to):

- 1. Develop an understanding of the core principles of transformative justice and how transformative justice supports the analysis of different forms of structural oppression;
- 2. Develop an understanding of the transformative and restorative justices principles and practices in the building and sustaining of community;
- 3. Sequence activities to use structural forms of analysis to develop a more in-depth understanding of how and why different forms of oppression continue to exist;
- 4. Sequence activities to resolve problems of harm and injury leading to healing on both individual and collective levels;
- 5. Introduce and facilitate different types of restorative circles can support positive change can lessen the impact of different forms of oppression in communities, schools and families;
- 6. Determine how implicit bias is influencing how human rights are both interpreted and implemented;
- 7. Contextualize human rights into a culturally responsive curriculum; and
- 8. Know how to plan a sequenced of structural analysis leading to organizing and activism leading to positive change

5. Date of Departmental Approval: April 11, 2019

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

Name of Program and Degree Award: Masters of Science in Secondary Science Education, Science Education Sequence 3 (Trans B Sequence) Hegis Number: 0834.00 Program Code: 92094 Effective Term: Spring 2021

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

2. From: Science Education M.S.Ed. Program

This program leads to a master's degree in Science Education. Upon completion of additional requirements, candidates will be eligible to receive New York State Initial Certification to teach one or more of the following sciences at the level of adolescent education (Grades 7-12): biology, chemistry, earth science, general science, and physics.

To be eligible for the Science Education Master's Program, potential students must fall into one of the following categories:

Sequence 1: For candidates who have, or are eligible for, Initial Certification in subjects other than science and who seek certification as science teachers.

Sequence 2: For candidates who have completed at least 36 credits in biology, chemistry, geology, or physics, but who lack professional education coursework and who seek Initial Certification.

Sequence 3: For candidates who hold a valid Transitional B certificate in biology, chemistry, earth science, general science, or physics, Grades 7-12, from New York State.

Science Education Admission Requirements

- Possess a bachelor's degree (or its equivalent) from an accredited college or university with an overall index of 3.0 or better.
- Demonstrate the ability to successfully pursue graduate study. (Above-average achievement in academic work and in the teaching specialization is required).
- Submission of scores on the Content Specialty Test (CST).
- For Sequence 1 admission: An undergraduate science major or the equivalent and a minor in middle and high school education or the equivalent.

- For Sequence 2 and 3 admission: At least 36 credits in biology, chemistry, geology, or physics. Matriculants may be asked to complete undergraduate and/or graduate prerequisite coursework in addition to degree requirements, based on the evaluation of their credentials by an adviser in the Science Education Program.
- Satisfy appropriate voice, speech, and health standards.
- Submit two letters of recommendation, at least one of which is from a college or university science instructor.
- Personal interview.

Science Education Degree Requirements

Students must consult with an adviser in the Science Education Program before starting their master's program. During their first semester, matriculated students are required to plan their graduate program with an adviser in the Science Education Program. Students must complete one of the three sequences outlined below.

Curriculum

The curriculum for each sequence is distributed in four instructional modules as follows:

Sequence 3 (34-36 credits)

Core Education Sequence (10 credits):

ESC 501	Psychological Foundations of Education	3 cr
ESC 502	Historical Foundations of Education: A Multicultural	3 cr
	Perspective	
ESC 519	Teaching Science in Middle and High School	3 cr

ESC 789 Independent Study in Curriculum Development 1 cr

Curriculum and Instruction (12 credits):

ESC 506	Special Needs Education in TESOL and Secondary Settings	3 cr
ESC 536	Teaching Technology Subjects in Middle and High School	3 cr
ESC 767	The Museum as a Resource for Teaching Science	3 cr
ESC 770	Methods of Teaching Science in Secondary Schools:	1 cr
	Selected Topics	

ESC 767 or Equivalent

Research and Culmination Projects (6 credits):

ESC 705Method of Educational Research3 crESC 708Project Seminar in Curriculum, Materials, and Assessment in3 crSpecialized Areas3 cr

Graduate Science Content (6-8 credits):

Science content course requirements must align with undergraduate science preparation and with intended certification subject area. Consult with an adviser in the

Science Education Program for the appropriate course(s) to satisfy this requirement. Such courses may include but are not limited to:

Biology: BIO 618 BIO 611 BIO 612	Problems in Ecology Problems in Microbiology Plant Growth and Development	4 cr 3 cr 4 cr
Chemistry: CHE 545 CHE 544 CHE 548	Advanced Inorganic Chemistry Biochemistry Special Topics in Modern Organic Chemistry	3 cr 3 cr 3 cr
Geology: GEO 501 GEO 502 GEO 503	Earth Processes Earth History Geologic Field Methods	3 cr 3 cr 3 cr
Physics: PHY 601 AST 601 AST 602	Advanced General Physics Astronomy of Solar Systems Stellar Astronomy	3 cr 4 cr 4 cr
General So BIO 618 CHE 542 GEO 501 PHY 601	Problems in Ecology Advanced Inorganic Chemistry	4 cr 3 cr 3 cr 3 cr

3. <u>To</u>:

Science Education M.S.Ed. Program

This program leads to a master's degree in Science Education. Upon completion of additional requirements, candidates will be eligible to receive New York State Initial Certification to teach one or more of the following sciences at the level of adolescent education (Grades 7-12): biology, chemistry, earth science, general science, and physics.

To be eligible for the Science Education Master's Program, potential students must fall into one of the following categories:

Sequence 1: For candidates who have, or are eligible for, Initial Certification in subjects other than science and who seek certification as science teachers.

Sequence 2: For candidates who have completed at least 36 credits in biology, chemistry, geology, or physics, but who lack professional education coursework and who seek Initial Certification.

Sequence 3: For candidates who hold a valid Transitional B certificate in biology, chemistry, earth science, general science, or physics, Grades 7-12, from New York State.

Science Education Admission Requirements

- Possess a bachelor's degree (or its equivalent) from an accredited college or university with an overall index of 3.0 or better.
- Demonstrate the ability to successfully pursue graduate study. (Above-average achievement in academic work and in the teaching specialization is required).
- Submission of scores on the Content Specialty Test (CST).
- For Sequence 1 admission: An undergraduate science major or the equivalent and a minor in middle and high school education or the equivalent.
- For Sequence 2 and 3 admission: At least 36 credits in biology, chemistry, geology, or physics. Matriculants may be asked to complete undergraduate and/or graduate prerequisite coursework in addition to degree requirements, based on the evaluation of their credentials by an adviser in the Science Education Program.
- Satisfy appropriate voice, speech, and health standards.
- Submit two letters of recommendation, at least one of which is from a college or university science instructor.
- Personal interview.

Science Education Degree Requirements

Students must consult with an adviser in the Science Education Program before starting their master's program. During their first semester, matriculated students are required to plan their graduate program with an adviser in the Science Education Program. Students must complete one of the three sequences outlined below.

Curriculum

The curriculum for each sequence is distributed in four instructional modules as follows:

Sequence 3 (37- 39 credits)

Core Education Sequence (13 credits):

ESC 501	Psychological Foundations of Education	3 cr
ESC 502	Historical Foundations of Education: A Multicultural	3 cr
	Perspective	
ESC 519	Teaching Science in Middle and High School	3 cr
ESC 789	Independent Study in Curriculum Development	1 cr
<u>ESC 595</u>	Internship in classroom teaching	<u>3 cr</u>
	Or	

<u>ESC 596</u>	Student Teaching Seminar in Secondary Schools	<u>3 cr</u>
ESC 506 ESC 536 ESC 767 ESC 770 <u>ESC 536 o</u>	A and Instruction (12 credits): Special Needs Education in TESOL and Secondary Settings Teaching Technology Subjects in Middle and High School The Museum as a Resource for Teaching Science Methods of Teaching Science in Secondary Schools: Selected Topics <u>r Equivalent</u> r Equivalent	3 cr 3 cr 3 cr 1 cr
Research a ESC 705 ESC 708	and Culmination Projects (6 credits): Method of Educational Research Project Seminar in Curriculum, Materials, and Assessment in Specialized Areas	3 cr 3 cr
Science co preparation Science Ed	Science Content (6-8 credits): Intent course requirements must align with undergraduate science and with intended certification subject area. Consult with an ad lucation Program for the appropriate course(s) to satisfy this req es may include but are not limited to:	viser in the
Biology: BIO 618 BIO 611 BIO 612	Problems in Ecology Problems in Microbiology Plant Growth and Development	4 cr 3 cr 4 cr
Chemistry CHE 545 CHE 544 CHE 548	Advanced Inorganic Chemistry Biochemistry Special Topics in Modern Organic Chemistry	3 cr 3 cr 3 cr
Geology: GEO 501 GEO 502 GEO 503	Earth Processes Earth History Geologic Field Methods	3 cr 3 cr 3 cr
Physics: PHY 601 AST 601 AST 602	Advanced General Physics Astronomy of Solar Systems Stellar Astronomy	3 cr 4 cr 4 cr
General So BIO 618 CHE 542 GEO 501	cience: Problems in Ecology Advanced Inorganic Chemistry Earth Processes	4 cr 3 cr 3 cr

PHY 601 Advanced General Physics

3 cr

4. Rationale:

Due to the extra preparation and mentorship that is needed for the edTPA, all science education students in sequence 3 will be required to take ESC 595 or ESC 596. This curriculum change will allow students to have additional contact time and support from the instructor.

5. Date of departmental approval: 4/18/18

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

1. Type of change: New Course

2.

Ζ.	
Department(s)	Middle and High School Education
Career	[] Undergraduate [X] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Secondary Education
Course Prefix & Number	ESC 538
Course Title	Principles of Computer Science Education II
Description	Consideration of teaching approaches to human computer interaction, problem solving, web design, programming, data analysis, and robotics in secondary education settings. Includes best practices in teaching ways to analyze and translate creative solutions and artifacts in a project-based learning environment.
Pre/ Co	NA
Requisites	
Credits	3
Hours	3
Liberal Arts	[]Yes [X]No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	<u>X</u> Not Applicable
Education	Required
Component	English Composition Mathematics Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society

3. Rationale:

ESC 538 is being proposed in order to respond to the need to introduce pre- and inservice teachers to content and pedagogy related to computer science education in secondary classroom settings. ESC 538 is an entry point to several topics in human computer interaction, problem solving, web design, programming, data analysis, and robotics in secondary education settings. The course was developed around a framework of both computer science content and computational practices used to understand human computer interaction and problem solving. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. This course will continue to allow Lehman College to build capacity to meet the demands for quality instructional technology and to build the national Computer Science for All initiative (http://www1.nyc.gov/office-of-the-mayor/education-vision-2015computer-science.page).

ESC 538 is modeled from a national effort to spread computer science courses to all schools funded by the National Science Foundation. Further, New York State and New York City implemented the new Computer Science for All initiative in fall 2015. This will require classroom teachers to have more specialized knowledge in instructional technology, including key pedagogical design principles, including human computer interactions, in computer science education.

4. <u>Learning Outcomes and Sample Syllabus (By the end of the course students</u> <u>will be expected to)</u>:

- Analyze one's own computational work and the work of others
- Apply abstractions and models to various computing problems
- Design and implement rubrics to be able to analyze creative solutions and artifacts (such as creating stories, animations, robotics and games on a programming platform)
- Analyze effects of development in computing
- Connect computing with other disciplines
- Communicate thoughts processes and results in simple formats
- Work effectively in teams

5. Date of Departmental Approval: February 22, 2017

DEPARTMENT OF MIDDLE AND HIGH SCHOOL EDUCATION

CURRICULUM CHANGE

1. Type of change: New Course

2.

2.	
Department(s	Middle and High School Education
)	
Career	[] Undergraduate [X] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Secondary Education
Course Prefix	ESC 539
& Number	
Course Title	Principles of Project Design and Assessment in Computer Science
	Education
Description	Examination of assessments for performance tasks associated with
	computational thinking in secondary classrooms and for instructional
	material that requires an iterative process similar to the methods
	computer scientists and engineers use to bring ideas to life in a project-
- / -	based environment.
Pre/ Co	NA
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. Rationale:

ESC 539 is being proposed in order to respond to the need to introduce pre- and inservice teachers to content and assessment related to computer science education in secondary classroom settings. Unlike ESC 537 and ESC 538, this course is aligned to commonly accepted entry-level computer science college courses for non-majors. The course introduces teachers to the central ideas of computer science, inviting teachers to develop the computational thinking vital for success across multiple disciplines in secondary settings. The course is unique in its focus on fostering teachers to be creative and encouraging them to apply creative processes in their classrooms assessments. Teachers are instructed on how to use assessments when engaging with instruction material that require an iterative process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life in a project-based classroom environment. The course was developed around a framework of both computer science content and computational practice. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. The purpose of this course will continue to allow Lehman College to build capacity to meet the demands for quality instructional technology and to build the national Computer Science for All initiative (http://www1.nyc.gov/office-of-the-mayor/education-vision-2015computer-science.page).

ESC 539 is part of a national effort to spread computer science courses to all schools funded by the National Science Foundation. Further, New York State and New York City implemented the new Computer Science for All initiative in fall 2015. This will require classroom teachers to have more specialized knowledge in instructional technology, including assessment in computer science education.

4. <u>Learning Outcomes and Sample Syllabus (By the end of the course students</u> <u>will be expected to)</u>:

- Design assessment that aligns to college-ready computer science standards
- Connect computing to its effects on society related to innovations
- Create projects like digital music, animations, websites, and programs using an iterative design technique
- Use abstraction to develop models and simulations of natural and artificial phenomena, make predictions about the world, and analyze their efficacy and validity
- Analyze problems and projects to be able to propose solutions
- Communicate about the impact of technology and the processes that are used to generate new ideas
- Collaborate with other individuals with diverse perspectives, skills, and backgrounds to address complex and open-ended problems

5. Date of Departmental Approval: February 22, 2017

Senate Meeting – December 11, 2019

Undergraduate Curriculum Committee (UCC) Report

The following proposals were approved unanimously by the UCC, with a quorum present on November 13, 2019 (9 of 10 members in attendance):

- 1. Anthropology, Biology, Chemistry
 - Change degree ABC BS
- 2. Biological Sciences
 - Change degree BS/MS
 - Change description BIO 489
 - Change description, pre-req BIO 490
- 3. Chemistry
 - Change desc, credits, hours CHE 444
- 4. Health Sciences
 - New course REC 322
 - Change degree BS TR
- 5. Music, Multimedia, Theatre & Dance
 - New course MSP 200
- 6. Sociology
 - Change minor
- 7. UCC
 - Change note LEH 351
 - Change note LEH 352
 - Change note LEH 354

Next meeting: February 5, 2020, 1 pm, Science 1405A

DEPARTMENT OF ANTHROPOLOGY

CURRICULUM CHANGE

Name of Program and Degree Award: Interdepartmental Concentration in Anthropology, Biology, and Chemistry, B.S. Hegis Number: 2202 Program Code: 02675 Effective Term: Fall 2020

1. <u>Type of change</u>: Degree requirements.

2. From:

Bulletin title: Anthropology (Physical), Biology, and Chemistry, B.S. (60 Credit Major)

The required credits are divided into tracks:

Track I: for specializations in Physical Anthropology (such as Human Origins, Human Genetics, Human Growth, Human Adaptation, and Forensic Anthropology).

Track II: for specialization in Criminalistics and for premedical, predental, and preveterinary students; preprofessional students may take any three courses from MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. (See elective credits below.) Other students may only receive credit for one course in each sequence.

As an alternative to *ANT 322 or MAT 132, PSY 226 may be taken to satisfy the statistics requirement.

GRADUATING SENIORS OR RECENT GRADUATES IN THIS PROGRAM WHO HAVE BEEN ACCEPTED TO MEDICAL OR DENTAL SCHOOL ARE ELIGIBLE TO RECEIVE THE MAIZIE HIRSCH SCHOLARSHIP OF \$5,000. UP TO TWO OF THESE SCHOLARSHIPS MAY BE AWARDED ANNUALLY. FOR FURTHER INFORMATION, CONTACT THE PROGRAM COORDINATOR OR PREMED ADVISER.

A. Track I (60 credits)

Credits to be taken by all majors in Track I for specialization in Physical Anthropology:

35-39	In required courses as follows:	Credits	Hours
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6
8	In physical anthropology:		

	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
9	In chemistry:		
	CHE 114: Essentials of General Chemistry (Lecture)	3	3
	CHE 115: Essentials of General Chemistry (Laboratory)	1.5	3
	CHE 120: Essentials of Organic Chemistry (Lecture)	3	3
	CHE 121: Essentials of Organic Chemistry (Laboratory)	1.5	3
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data Quantitatively	3	3
	Or MAT 132: Basic Concepts of Probability and Statistics	4	4
	Or PSY 226: Statistical Methods in Psychology	4	4
7-10	In physics and scientific thought:		
	Option 1 (10 credits):		
	PHY 166: General Physics I	5	6
	PHY 167: General Physics II	5	6
	Or option 2 (8 credits):	-	-
	PHY 166: General Physics I	<u>5</u>	<u>6</u>
	And one Scientific Thought course from Option 4		
	Or option 3 (7 credits):		
	PHY 135: Fundamental Concepts and Methods of Physics	4	5
	And one Scientific Thought course from Option 4		
	Or option 4 (9 credits):		
	Any three of these Scientific Thought courses:		
	HIS 301: Introduction to the History of Biology	3	3
	HIS 302: Science and Society	3	3
	HIS 304: History of Science in the Twentieth Century	3	3
	HIA 348: Introduction to the History of Science,	3	3

HIE 301: Introduction to the History of Science, from Descartes and Newton to Darwin and Einstein.	3	3
MAT 135: Concepts and Uses of Mathematics	3	4
CMP 108: Programming for Non-Computer Science Majors	3	3
PHI 353: Philosophy of Science	3	3
SOC 310: Knowledge, Science, and Society	3	3

Elective credits (21-25) to total at least 60 when added to the number of required credits taken. Students interested in Forensic Anthropology should include ANT 303 (Human Osteology, 4.5 credits, 6 hours). Any course in the list that follows may be taken for elective credit.

B. Track II (60 credits)

Credits to be taken by all majors in Track II for specializations in Criminalistics or for premedical, predental, or preveterinary students majoring in Anthropology (Physical), Biology, and Chemistry.

39-40	In required courses as follows:	Credits	Hours
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6
8	In physical anthropology:		
	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
20	In chemistry:		
	CHE 166: General Chemistry I	3	3
	CHE 167: General Chemistry Laboratory I	2	4
	CHE 168: General Chemistry II	3	3
	CHE 169: General Chemistry Laboratory II	2	4
	CHE 232: Organic Chemistry Lecture I	3	3
	CHE 233: Organic Chemistry Laboratory I	2	4
	CHE 234: Organic Chemistry Lecture II	3	3
	CHE 235: Organic Chemistry Laboratory II	2	4
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data Quantitatively	3	3

Or MAT 132: Basic Concepts of Probability and Statistics	4	4
Or PSY 226: Statistical Methods in Psychology	4	4

Elective credits (20-21) to total at least 60 when added to the number of required credits taken. Any course in the list that follows may be taken for elective credit. Those interested in Criminalistics should take CHE 266 (Introduction to Forensic Science) and consider extra Chemistry courses. As noted above, students in this track only may also include MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. Preprofessional students may count any three of these courses, while other students may only receive credit for one course in each sequence.

Courses Acceptable for Elective Credit:

ANT 206: Women and Men in Anthropological Perspective (3 credits, 3 hours) ANT 211: Introduction to Cultural Anthropology (3 credits, 3 hours) ANT 212: Ancient Peoples and Cultures (3 credits, 3 hours) ANT 300: Human Variation (3 credits, 3 hours) ANT 301: Human Origins (3 credits, 3 hours) ANT 302: Primate Behavior and Ecology (3 credits, 3 hours) ANT 303: Human Osteology (4.5 credits, 6 hours) ANT 305: Forensic Anthropology (3 credits, 3 hours) ANT 306: Survey of Forensic Sciences (3 credits, 3 hours) ANT 307: Anthropology of Growth (3 credits, 3 hours) ANT 309: Human Genetics (3 credits, 3 hours) ANT 310: Evolution of the Primates (3 credits, 3 hours) ANT 323: Methods and Philosophies in Paleoanthropology (3 credits, 3 hours) ANT 332: Kinship, Marriage, & the Family (3 credits, 3 hours) ANT 334: Mind and Culture (3 credits, 3 hours) ANT 341: Medical Anthropology (3 credits, 3 hours) ANT 360: Humans and the Environment (3 credits, 3 hours) ANT 370: Excavation of the Lehman College Site (4 credits, 5 hours) ANT 371: Field and Laboratory Methods in Archaeology (4 credits, 6 hours) ANT 489: Independent Research in Anthropology (if relevant topic; up to 6 credits) BIO 181: Anatomy and Physiology I (4 credits, 5 hours) BIO 182: Anatomy and Physiology II (4 credits, 5 hours) BIO 183: Human Biology (4 credits, 5 hours) BIO 184: Plants and People (4 credits, 5 hours) BIO 226: Human Physiology (3.5 credits, 5 hours) BIO 227: Mammalian Histology (4 credits, 6 hours) BIO 228: Mammalian Physiology (4 credits, 6 hours) BIO 230: Microbiology (4 credits, 6 hours) BIO 238: Genetics (4 credits, 6 hours) BIO 241: Evolution, Species, and Biogeography (3 credits, 3 hours) BIO 267: Comparative Anatomy of the Vertebrates (4 credits, 6 hours) BIO 268: Vertebrate Embryology (4 credits, 6 hours) BIO 302: Biogeography (4 credits, 4 hours)

BIO 331: Experimental Microbiology (4 credits, 6 hours) BIO 333: Endocrine Physiology (4 credits, 6 hours) BIO 339: Ecology (4 credits, 6 hours) BIO 400: Biological Chemistry (4 credits, 6 hours) BIO 401: Biological Systematics (4 credits, 6 hours) BIO 432: Biological Fine Structure (3 credits, 3 hours) BIO 433: Techniques in Electron Microscopy (3 credits, 6 hours) BIO 434: Radiation Biology (4 credits, 6 hours) CHE 232: Organic Chemistry Lecture I (3 credits, 3 hours) CHE 233: Organic Chemistry Lab I (2 credits, 4 hours) CHE 234: Organic Chemistry Lecture II (3 credits, 3 hours) CHE 235: Organic Chemistry Lab II (2 credits, 4 hours) CHE 244-245: Biochemistry (4.5 credits, 6 hours) CHE 249: Quantitative Analysis (5 credits, 8 hours) CHE 332: Physical Chemistry I (3 credits, 3 hours) CHE 334: Physical Chemistry II (3 credits, 3 hours) CHE 335: Physical Chemistry Lab (3 credits, 6 hours) CHE 444: Biochemistry I (3 credits, 4 hours) CHE 446: Biochemistry II (3 credits, 3 hours) GEH 320: Population Geography (3 credits, 3 hours) GEH 335: Problems in Human Ecology (3 credits, 3 hours) GEO 167: Evolution of the Earth (4 credits, 5 hours) GEO 242: Introductory Paleontology (4 credits, 5 hours) GEO 303: Stratigraphy and Sedimentology (4 credits, 6 hours) GEO 342: Micropaleontology (4 credits, 5 hours) GEP 204: Basic Mapping: Application and Analysis (3 credits, 4 hours) GEP 205: Principles of Geographic Information Science (3 credits, 4 hours) GEP 210: Introduction to Environmental Sciences (3 credits, 3 hours) GEP 321: Introduction to Remote Sensing (4 credits, 5 hours) PSY 217: Child Psychology (3 credits, 3 hours) PSY 248: Introduction to Primate Behavior Studies (3 credits, 3 hours) PSY 305: Experimental Psychology I (4 credits, 6 hours) PSY 306: Experimental Psychology II (4 credits, 6 hours) PSY 310: Psychology of Learning (3 credits, 3 hours) PSY 316: Physiological Psychology (3 credits, 3 hours) PSY 318: Comparative Psychology and Ethology (3 credits, 3 hours)

3. <u>To</u>:

Bulletin title: Interdepartmental Concentration in Anthropology, Biology, and Chemistry, B.S. (60-68 Credit Major)

The required credits are divided into tracks:

Track I: for specializations in <u>Biological</u> Anthropology (such as Human Origins, Human Genetics, Human Growth, Human Adaptation, and Forensic Anthropology).

Track II: for specialization in Criminalistics and for <u>students interested in health-</u><u>professional careers (these students are advised to visit the pre-health office before</u>

<u>choosing their electives)</u>; students <u>in this track</u> may take any three courses from MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. (See elective credits below.)

A. Track I (<u>60-63</u> credits)

Credits to be taken by all majors in Track I for specialization in <u>Biological</u> Anthropology:

In biology: BIO 166: Principles of Biology: Cells and Genes		
BIO 166: Principles of Biology: Cells and Genes		
DIO 100. I HITCIPIES OF DIOLOGY. Cells and Celles	4	6
BIO 167: Principles of Biology: Organisms	4	6
In <u>biological</u> anthropology:		
ANT 171: Introduction to Human Evolution	4	5
ANT 269: Introduction to Human Variation	4	5
In chemistry:		
CHE 114: Essentials of General Chemistry (Lecture)	3	3
CHE 115: Essentials of General Chemistry (Laboratory)	1.5	3
CHE 120: Essentials of Organic Chemistry (Lecture)	3	3
CHE 121: Essentials of Organic Chemistry (Laboratory)	1.5	3
In quantitative methods:		
ANT 322: Analyzing Anthropological Data Quantitatively	3	3
Or MAT 132: Introduction to Statistics	4	4
Enhanced scientific and analytic competency: Up to 14 credits from the following list		
CMP 167: Programming Methods I	<u>3</u>	<u>4</u>
CMP 267: Programming Methods II	<u>3</u>	
MAT 128: Foundations of Data Science	<u>3</u>	<u>4</u>
MAT 172: Precalculus	<u>4</u>	<u>4</u> <u>4</u> <u>4</u>
PHY 166: General Physics I	5	6
PHY 167: General Physics II	5	6
	In biological anthropology:ANT 171: Introduction to Human EvolutionANT 269: Introduction to Human VariationIn chemistry:CHE 114: Essentials of General Chemistry (Lecture)CHE 115: Essentials of General Chemistry (Laboratory)CHE 120: Essentials of Organic Chemistry (Lecture)CHE 121: Essentials of Organic Chemistry (Laboratory)CHE 121: Essentials of Organic Chemistry (Laboratory)In quantitative methods:ANT 322: Analyzing Anthropological Data QuantitativelyOr MAT 132: Introduction to StatisticsEnhanced scientific and analytic competency: Up to 14 credits from the following listCMP 167: Programming Methods ICMP 267: Programming Methods IIMAT 128: Foundations of Data ScienceMAT 172: PrecalculusPHY 166: General Physics I	In biological anthropology:ANT 171: Introduction to Human Evolution4ANT 269: Introduction to Human Variation4In chemistry:3CHE 114: Essentials of General Chemistry (Lecture)3CHE 115: Essentials of General Chemistry (Laboratory)1.5CHE 120: Essentials of Organic Chemistry (Lecture)3CHE 121: Essentials of Organic Chemistry (Laboratory)1.5CHE 121: Essentials of Organic Chemistry (Laboratory)1.5In quantitative methods:3ANT 322: Analyzing Anthropological Data Quantitatively3Or MAT 132: Introduction to Statistics4Enhanced scientific and analytic competency: Up to 14 credits from the following list3CMP 167: Programming Methods I 33MAT 128: Foundations of Data Science3MAT 172: Precalculus4PHY 166: General Physics I5

Elective credits (<u>17-35</u>) to total <u>60-63</u> when added to the number of required credits taken. Students interested in Forensic Anthropology should include ANT 303 (Human Osteology, 4.5 credits, 6 hours). Any course in the list that follows may be taken for elective credit.

B. Track II (65-68 credits)

Credits to be taken by all majors in Track II for specializations in Criminalistics <u>and for</u> <u>students interested in health-professional careers</u>.

<u>46-47</u>	In required courses as follows:	Credits	Hours
8	In biology:		
	BIO 166: Principles of Biology: Cells and Genes	4	6
	BIO 167: Principles of Biology: Organisms	4	6
8	In <u>biological</u> anthropology:		
	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
<u>23</u>	In chemistry:		
	CHE 166: General Chemistry I	<u>4</u>	<u>4</u>
	CHE 167: General Chemistry Laboratory I	<u>1.5</u>	<u>3</u>
	CHE 168: General Chemistry II	<u>4</u>	<u>4</u>
	CHE 169: General Chemistry Laboratory II	<u>1.5</u>	<u>3</u>
	CHE 232: Organic Chemistry Lecture I	<u>4</u>	<u>4</u>
	CHE 233: Organic Chemistry Laboratory I	2	4
	CHE 234: Organic Chemistry Lecture II	<u>4</u>	<u>4</u>
	CHE 235: Organic Chemistry Laboratory II	2	4
<u>7-8</u>	In quantitative methods:		
	MAT 172 Precalculus [‡] (pre-requisite for CHE 166) AND either:	<u>4</u>	<u>4</u>
	ANT 322: Analyzing Anthropological Data Quantitatively	3	3
	Or MAT 132: Introduction to Statistics	4	4

[‡] May also be satisfied by either successful completion of MAT 108 and MAT 171 or placement into MAT 175 by the Department of Mathematics.

Elective credits (<u>18-22</u>) to total <u>65-68</u> when added to the number of required credits taken. Any course in the list that follows may be taken for elective credit. Those interested in Criminalistics should consider extra Chemistry courses. As noted above, students in this track only may also include MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major.

Courses Acceptable for Elective Credit:

ANT 206: Women and Men in Anthropological Perspective (3 credits, 3 hours) ANT 211: Introduction to Cultural Anthropology (3 credits, 3 hours) ANT 212: Ancient Peoples and Cultures (3 credits, 3 hours) ANT 300: Human Variation (3 credits, 3 hours)

ANT 301: Human Origins (3 credits, 3 hours) ANT 302: Primate Behavior and Ecology (3 credits, 3 hours) ANT 303: Human Osteology (4.5 credits, 6 hours) ANT 305: Forensic Anthropology (3 credits, 3 hours) ANT 306: Survey of Forensic Sciences (3 credits, 3 hours) ANT 307: Anthropology of Growth (3 credits, 3 hours) ANT 309: Human Genetics (3 credits, 3 hours) ANT 310: Evolution of the Primates (3 credits, 3 hours) ANT 323: Methods and Philosophies in Paleoanthropology (3 credits, 3 hours) ANT 332: Kinship, Marriage, & the Family (3 credits, 3 hours) ANT 334: Mind and Culture (3 credits, 3 hours) ANT 341: Medical Anthropology (3 credits, 3 hours) ANT 360: Humans and the Environment (3 credits, 3 hours) ANT 370: Excavation of the Lehman College Site (4 credits, 5 hours) ANT 371: Field and Laboratory Methods in Archaeology (4 credits, 6 hours) ANT 489: Independent Research in Anthropology (if relevant topic; up to 6 credits) BIO 181: Anatomy and Physiology I (4 credits, 5 hours) BIO 182: Anatomy and Physiology II (4 credits, 5 hours) BIO 183: Human Biology (4 credits, 5 hours) BIO 184: Plants and People (4 credits, 5 hours) BIO 226: Human Physiology (3.5 credits, 5 hours) BIO 227: Mammalian Histology (4 credits, 6 hours) BIO 228: Mammalian Physiology (4 credits, 6 hours) BIO 230: Microbiology (4 credits, 6 hours) BIO 238: Genetics (4 credits, 6 hours) BIO 241: Evolution, Species, and Biogeography (3 credits, 3 hours) BIO 267: Comparative Anatomy of the Vertebrates (4 credits, 6 hours) BIO 268: Vertebrate Embryology (4 credits, 6 hours) BIO 302: Biogeography (4 credits, 4 hours) BIO 331: Experimental Microbiology (4 credits, 6 hours) BIO 333: Endocrine Physiology (4 credits, 6 hours) BIO 339: Ecology (4 credits, 6 hours) BIO 400: Biological Chemistry (4 credits, 6 hours) BIO 401: Biological Systematics (4 credits, 6 hours) BIO 432: Biological Fine Structure (3 credits, 3 hours) BIO 433: Techniques in Electron Microscopy (3 credits, 6 hours) CHE 232: Organic Chemistry Lecture I (4 credits, 4 hours) CHE 233: Organic Chemistry Lab I (2 credits, 4 hours) CHE 234: Organic Chemistry Lecture II (4 credits, 4 hours) CHE 235: Organic Chemistry Lab II (2 credits, 4 hours) CHE 244: Introduction to Biochemistry (3 credits, 3 hours) CHE 245: Biochemistry Laboratory (1.5 credits, 3 hours) CHE 249: Quantitative Analysis (5 credits, 8 hours) CHE 332: Introductory Physical Chemistry I (3 credits, 3 hours) CHE 334: Introductory Physical Chemistry II (3 credits, 3 hours) CHE 335: Introductory Physical Chemistry of Biosystems Laboratory (3 credits, 6 hours) CHE 444: Biochemistry I (3 credits, 4 hours)

- CHE 446: Biochemistry II (3 credits, 3 hours)
- GEH 320: Population Geography (3 credits, 3 hours)
- GEH 335: Problems in Human Ecology (3 credits, 3 hours)
- GEO 167: <u>Earth Evolution (3</u> credits, <u>3</u> hours)
- GEO 242: Introductory Paleontology (4 credits, 5 hours)
- GEO 303: Stratigraphy and Sedimentology (4 credits, 6 hours)
- GEO 342: Micropaleontology (4 credits, 5 hours)
- GEP 204: Basic Mapping: Application and Analysis (3 credits, 4 hours)
- GEP 205: Principles of Geographic Information Science (3 credits, 4 hours)
- GEP 321: Introduction to Remote Sensing (4 credits, 5 hours)
- PSY 166: General Psychology (3 credits, 3 hours)

PSY 217: Child Psychology (3 credits, 3 hours)

- PSY 248: Introduction to Primate Behavior Studies (3 credits, 3 hours)
- PSY 310: Psychology of Learning (3 credits, 3 hours)
- PSY 316: Physiological Psychology (3 credits, 3 hours)
- PSY 318: Comparative Psychology and Ethology (3 credits, 3 hours)

4. Rationale:

Bulletin title change:

The title currently in the bulletin, "Anthropology (Physical), Biology, and Chemistry ..." is not the official NYSED-registered title. The title change fixes that.

Preamble changes:

After review of other bulletin entries, none of which include scholarship information, the scholarship text was removed. That information will be provided to students on the Anthropology Department website and through direct emails.

Changes to both tracks:

MAT 172 Precalculus is added into both tracks: as an option in the "analytic competency" subsection of Track 1 and as a requirement in the Track 2 "quantitative methods" subsection (it is a pre-requisite for some electives and the required chemistry series in Track 2).

PSY 226 Statistical Methods in Psychology is removed from both tracks. Since the last revision of this major, the Psychology department added Psychology and Mathematics pre-requisites for PSY 226 that make it impossible to include in the ABC major.

Physical Anthropology is changed to Biological Anthropology throughout. Biological anthropology is the broader and more inclusive term; physical anthropology has stronger connections to problematic racist and eugenicist histories within the discipline. (The main American association for biologically-oriented anthropologists is currently in the process of changing its name from the American Association of Physical Anthropologists to the American Association of Biological Anthropologists).

Track 1 changes:

Our ABC Track 1 students must either take PHY 166+167 or show the initiative to request and receive authorization for some other courses to fulfill the history and philosophy of science requirement (these courses are no longer regularly offered) – we have been substituting advanced courses in Anthropology, Biology, and Chemistry to allow a non-physics fulfilment of this required courses sub-section.

In the revision of this section, students continue to have the option of taking General Physics I and II (these courses are regularly offered). Additional options in computer science and data science are added; basic competency in these areas is increasingly important in all aspects of scientific work (the added courses are regularly offered). Additionally, students that wish to choose to delve deeper into anthropology, biology, or chemistry can do so by taking a greater number of elective courses.

Track 2 changes:

Since the last update of this major, the Department of Chemistry changed the credits/hours on CHE 166, 167, 168, 169, 232, & 234. The changes in Track 2 fix the credits/hours of those courses in the major.

In the introductory overview of Track 2, students interested in health-related professions are encouraged to consult with the pre-health advisor.

In the postscript to the Track 2 required courses, "take CHE 266 (Introduction to Forensic Science) and" is deleted as CHE 266 is not offered (and was never on the ABC electives list).

Language indicating that only pre-health-professional students in Track 2 can count 3 of MAT 175, MAT 176, PHY 166, PHY 167 towards their major elective credits was removed as it is impossible to enforce (and is not currently enforced). Practically speaking, only Track 2 majors interested in applying to professional schools take these courses.

Elective course changes:

BIO 434 no longer exists.

PSY 166 is a pre-requisite for all upper-level psychology courses. PSY 305 & 306 are intended for psychology majors and have a pre-requisite not in the major.

Additional updates are name, credit, and hour changes since the last revision of this major.

5. Date of Department Approval:

Anthropology: September 23, 2019 Biology: October 23, 2019 Chemistry: November 5, 2019

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: Biology B.S./M.S., Dual Degree Hegis Number: 0401.00 Program Code: 35447 Effective Term: Spring 2020

1. <u>Type of Change</u>: Change in Description

2. <u>From</u>: Five Year Combined B.S./M.S. Dual Biology Degree

The Five-Year Biology B.S./M.S. degree offers qualified students the opportunity to earn both a Bachelor of Science and a Master of Science degree in Biology, which may be completed in as little as five years.

(Years 1-4) 120-credit B.S. in Biological Sciences. Winter and Summer Sessions must be used. BIO 489 must be taken twice and BIO 490 should be taken in the senior year.

(Years 1-2) Students must take the biology, math, chemistry, and physics prerequisites.

(Year 3) Research advisor chosen in Spring term.

(Year 4) Three M.S. courses taken for credit in both degrees (12 credits total). Must take BIO 489 in the Fall and BIO 489 and BIO 490 in the Spring. Graduation in June with Honors, having completed a research project under faculty sponsor.

(Year 5) Enrolled in M.S. program in thesis track (30 course credits, 12 of which are satisfied in Year 4). BIO 7991, and 7992 with possibility of BIO 7993. Defense of thesis and graduation by September 1.

30-32 M.S. Credits to be distributed as follows:

Students must take three M.S. courses in Year 4 (12 credits).

For example: BIO 634: Cell Biology and Electron Microscopy (4 credits).

Students must take three to four M.S. courses in Year 5 (12-14 credits).

For example: three thesis research courses (6 credits).

Note 1: This program will allow students to finish 1-2 years earlier than they would if they did a separate B.S. followed by a M.S. Additionally, this program provides students with extensive research experience, which will make them more competitive for jobs, doctoral programs and medical programs.

Note 2: To be eligible for the fifth-year program, all students must demonstrate an interest in, achievement in, or affinity for biology. This will be determined by having a minimum of 48 semester hours of mathematics and sciences study, including MAT 175 with a GPA of 3.0. Candidates must apply to the program no later than the first semester of their junior year and may apply as early as the second semester of their sophomore year.

The accelerated pace of this program is made possible by offering qualified students the opportunity to take masters level courses during their final year of undergraduate work. Students qualify by demonstrated attainment of a GPA of 3.0 in mathematics and science coursework as well as a GPA of 3.25 in the major through the first three years of study, and by completing all of the necessary prerequisites for those courses, which will ensure that they are prepared for graduate-level work

3. <u>To:</u> Five Year Combined B.S./M.S. Dual Biology Degree

The Five-Year Biology B.S./M.S. <u>is a single</u> degree that offers qualified students the opportunity to earn both a Bachelor of Science and a Master of Science degree in Biology, which may be completed in as little as five years.

(Years 1-4) 120-credit B.S. in Biological Sciences. Winter and Summer Sessions must be used. BIO 489 must be taken twice and BIO 490 should be taken in the senior year.

(Years 1-2) Students must take the biology, math, chemistry, and physics prerequisites.

(Year 3) Research advisor chosen in Spring term.

(Year 4) Three M.S. courses taken for credit in both degrees (12 credits total). Must take BIO 489 in the Fall and BIO 489 and BIO 490 in the Spring.

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The accelerated pace of this program is made possible by offering qualified students the opportunity to take masters level courses during their final year of undergraduate work. Students qualify by demonstrated attainment of a GPA of 3.0 in mathematics and science coursework as well as a GPA of 3.25 in the major through the first three years of study, and by completing all of the necessary prerequisites for those courses, which will ensure that they are prepared for graduate-level work.

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

We are correcting the description of the program to avoid confusions about the number of degrees students will earn. The previous description indicated that students were entitled to graduating twice and receiving two separate degrees, one for completing the BS degree and a second one for completing the MS degree. The revised description clarifies that students would receive a signal BS/MS degree.

5. Date of departmental approval: September 18, 2019

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: Course description

2. From:

Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 489
& Number	
Course Title	Introduction to Experimental Biology
Description	Individual laboratory investigation for advanced students, under the guidance of a faculty member. Students are required to submit a written report of their laboratory investigation to the faculty member.
Pre/ Co	Sponsorship of a faculty member, Departmental permission prior to
Requisites	preliminary registration, and 15 BIO credits.
Credits	1 (maximum 3 credits)
Hours	1
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 489
& Number	
Course Title	Introduction to Experimental Biology
Description	Individual laboratory investigation for advanced students, under the guidance of a faculty member. Students are required to <u>create and</u> <u>present a poster describing their work at annual meetings that are</u> <u>held either within or outside of Lehman College. Sponsorship of a faculty member is required.</u>
Pre/ Co	Departmental permission and 15 BIO credits.
Requisites	
Credits	1 (may be repeated for a maximum 3 credits)
Hours	1
Liberal Arts	[X]Yes []No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc) General	X Not Applicable
Education	X_Not Applicable Required
Component	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>): To encourage students to present their work that would improve their understanding of the project and their communication skills. A note is added to highlight that poster creation and presentation is not optional, rather it is mandatory for passing the course.

5. Date of departmental approval: November 7, 2018

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: Course description and Prerequisites

2. From:

<u>z. 110111</u> .	
Department(s)	Biological Sciences
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 490
Course Title	Honors in Biological Sciences
Description	Independent laboratory investigation for advanced students, under the guidance of a faculty member (minimum of 90 hours). Students are required to create and present a poster of their research at annual meetings that are held either within or outside of Lehman College.
Pre/ Co Requisites	A GPA of 3.0 or better at the time of registration, satisfactory completion of 18 credits in BIO or related fields, including either PHY 167 or 169, plus CHE 234-235, and endorsement by a faculty member to be submitted to the Chair prior to preliminary registration.
Credits	3
Hours	3
Liberal Arts	[X]Yes []No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	<pre>X_Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity</pre>

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 490
& Number	
Course Title	Honors in Biological Sciences
Description	Independent laboratory investigation for advanced students, under the guidance of a faculty member (minimum of 90 hours). Students are required to create and present a poster of their research at annual meetings that are held either within or outside of Lehman College. <u>Sponsorship of a faculty member is required. NOTE:</u> <u>Required for Honors in Biological Sciences.</u>
Pre/ Co	A GPA of 3.0 or better, completion of at least one semester of Bio
Requisites	489, department permission.
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
	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 prerequisite of Bio 489 as an introduction to research will better prepare students for hands on research that is required in Bio 490. Working with the same faculty for both Bio 489 and Bio 490 is encouraged but not required to help students become familiar with faculty research before attempting to participate in hands on laboratory activities. A note is added to highlight that poster creation and presentation is not optional, rather it is mandatory for passing the course. The note also specifies that Bio 490 will be used as a criteria for awarding departmental honors.

5. Date of departmental approval: November 7, 2018

DEPARTMENT OF CHEMISTRY

CURRICULUM CHANGE

1. Type of Change: Change in description, credits and hours.

2. From:

Department(s)	Chemistry
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Chemistry
Course Prefix	CHE 444
& Number	
Course Title	Biochemistry I
Description	(Closed to students who have taken CHE 244.) Fall term only. Study of amino acids, protein structure and conformation, kinetic and molecular basis of enzyme action, lipids, and membrane structure, carbohydrates and intermediary metabolism, regulatory mechanisms, elementary thermodynamics in biochemical equilibria, and relationships between structure and function of biological macromolecules.
Pre/ Co	PREREQ: CHE 234.
Requisites	
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 FlexibleWorld CulturesUS Experience in its DiversityCreative Expression

	Individual and Society Scientific World

3. <u>To:</u>

3. <u>10</u> :	
Department(s)	Chemistry
Career	[X] Undergraduate [] Graduate
Academic Level	[X] Regular [] Compensatory [] Developmental [] Remedial
Subject Area	Chemistry
Course Prefix	CHE 444
& Number	
Course Title	Biochemistry I
Description	Fall term only. Study of amino acids, protein structure and conformation, kinetic and molecular basis of enzyme action, lipids, and membrane structure, carbohydrates and intermediary metabolism, regulatory mechanisms, elementary thermodynamics in biochemical equilibria, and relationships between structure and function of biological macromolecules.
Pre/ Co	PREREQ: CHE 234. Departmental Permission required for students
Requisites	who have previously taken CHE 244.
Credits	4
Hours	4
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>:

Description Justification:

CHE244 is an introduction to biochemistry course that has been re-tooled for the students enrolled in the nutrition /nursing programs. This course is no longer similar to CHE444 and so the Chemistry Department has decided to allow students who have taken CHE244 and wish to make a career change (to science or medicine for example) be allowed to take CHE444 with departmental permission.

Hour/Credit Justification:

In an attempt to address poor student performance in Biochemistry the Chemistry Department has modified its pedagogical approach to include techniques that more actively engage students in their learning. To be truly effective this new approach requires students to be intellectually and actively engaged for four hours of structured course work every week instead of three.

One of the more successful techniques that have been used across the country to engage students is the inclusion of an additional course hour during which students engage in problem solving through peer instruction and/or group workshops. These problem-solving sessions provide a structured opportunity for students to solve typically difficult problems, in a collaborative setting. (There is tremendous research evidence to demonstrate the effectiveness of collaborative settings on student learning.)

The Chemistry Department proposes to change from a three-hour traditional lecture to a four-hour classroom model that incorporates group workshops and problem solving. In this new model students will learn new course content through both traditional lecture and through structured problem-solving exercises. As a consequence, all four hours of the course will be intellectually demanding and involve the delivery of significant course content. Students should receive course credit that appropriately reflects the workload of the course.

5. Date of departmental approval: September 25, 2019

DEPARTMENT OF HEALTH SCIENCES

CURRICULUM CHANGE

1. Type of change: New Course

Department(s)	Health Sciences
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	Therapeutic Recreation
Course Prefix	REC 322
& Number	
Course Title	Assessment in Therapeutic Recreation
Description	Examination of assessment tools, techniques, terminology, and
	procedures utilized in therapeutic recreation programs.
Pre/ Co	REC 321 Co Requisite
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. Rationale:

The Therapeutic Recreation program at Lehman College currently offers five core TR courses, but the new change of the NCTRC Certification Standards pertaining to the

required number of therapeutic recreation content course is a minimum of six (6) in order to qualify to sit for the national exam to become a Certified Therapeutic Recreation Specialist (CTRS). This will go into effect January 1, 2022. Adding a course in assessment will allow students to practice various assessment tools and techniques, and acquire useful experience administrating medical documents at an earlier stage in their academic instruction.

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

- At the end of the course students will be able to communicate assessment results using appropriate medical terminology.
- Students will be able to evaluate standardized assessments for validity, reliability, and appropriateness for population.
- Students will be able to describe common standardized assessments for various populations.
- Students will be able to demonstrate competence administering assessments in various health domains (physical, behavioral, social, cognitive, and leisure participation).

5. Date of Departmental Approval: 10/23/19

DEPARTMENT OF HEALTH SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: B.S. in Therapeutic Recreation Hegis Number: 2199 Program Code: 34565 Effective Term: Fall 2020

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

2. <u>From</u>: 52-credit major in B.S. Therapeutic Recreation

- 12 Credit in Recreation Education
 - REC 300 History and Philosophy of Recreation
 - REC 320 Recreation Leadership
 - REC 321 Introduction to Therapeutic Recreation
 - REC 387 Research and Evaluation in Recreation
 - REC 401 Administration of Recreation Services
- 15 Credits in Therapeutic Recreation
 - REC 321 Introduction to Therapeutic Recreation
 - REC 324 TR for Children and Youth
 - REC 325 TR in Long-term Care
 - REC 421 Programs in TR services
 - REC 425 Processes and Techniques of TR
- <u>3 Credits in Major Electives:</u>
 - Select from REC, REH, EXS, DNC, DFN, HEA, HSA, and/or HSD
- 9 Credits in Internship:
 - REC 370 Recreation Internship
 - REC 471 TR internship
- 13 Credits in Supportive Course:
 - PSY 166 General Psychology
 - PSY 234 Abnormal Psychology

- HIN 268 Human Growth and Development
- BIO 181 Anatomy and Physiology

3. <u>To:</u> 52-credit major in Therapeutic Recreation

- 12 Credit in Recreation Education
 - REC 300 History and Philosophy of Recreation
 - REC 320 Recreation Leadership
 - REC 321 Introduction to Therapeutic Recreation
 - REC 387 Research and Evaluation in Recreation
 - REC 401 Administration of Recreation Services
- <u>18 Credits</u> in Therapeutic Recreation
 - REC 321 Introduction to Therapeutic Recreation
 - REC 324 TR for Children and Youth
 - REC 325 TR in Long-term Care
 - REC 421 Programs in TR services
 - REC 425 Processes and Techniques of TR
 - REC 322 Assessment in Therapeutic Recreation
- 9 Credits in Internship:
 - REC 370 Recreation Internship
 - REC 471 TR internship
- 13 Credits in Supportive Course:
 - PSY 166 General Psychology
 - PSY 234 Abnormal Psychology
 - HIN 268 Human Growth and Development
 - BIO 181 Anatomy and Physiology

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

With an addition of REC 322 in core therapeutic recreation course according to the new NCTRC Certification Standards, it will result in 18 credits in Therapeutic Recreation in B.S. in Therapeutic Recreation. Therefore, there will be no room for taking an elective course for students in B.S. Therapeutic Recreation. Taking one more core course will more benefit students to be prepared well at an earlier state in their academic instruction.

5. Date of departmental approval: 10/23/19

UNDERGRADUATE CURRICULUM COMMITTEE

CURRICULUM CHANGE

1. Type of Change: Note

2. From: Strikethrough the changes

Department(s)	Provost
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	LEH
Course Prefix	LEH 351
& Number	
Course Title	Studies in Scientific and Applied Perspectives
Description	Selected topics in the social sciences, life and physical sciences and applied perspectives. NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet. NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Accounting, Anthropology, Anthropology/Biology/Chemistry (interdisciplinary concentration), Biology, Business Administration, Chemistry, Computer Graphics and Imaging, Computer Information Systems, Computer Science, Dietetics, Food, and Nutrition, Earth Science, Economics, Economics and Mathematics, Environmental Science, Exercise Science, Geography, Geology, Health Education and Promotion, Health Education N-12, Health Services Administration, Italian American Studies, Linguistics, Mathematics, Nursing, Physics, Political Science, Psychology, Recreation Education, Social Work, Sociology, Speech Pathology and Audiology, Therapeutic Recreation.
Pre/ Co	Declared major and either completion of 60 credits or an Associate's
Requisites	Degree.
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	

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. To: Underline the changes

Department(s)	Provost
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	LEH
Course Prefix	LEH 351
& Number	
Course Title	Studies in Scientific and Applied Perspectives
Description	Selected topics in the social sciences, life and physical sciences and applied perspectives. NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet. NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Accounting, Anthropology, Anthropology/Biology/Chemistry (interdisciplinary concentration), Biology, <u>Biology Teacher Grades 7-12</u> , <u>Biology BS/MS Dual Degree</u> , Business Administration, Chemistry, Computer Graphics and Imaging, Computer Information Systems, Computer Science, Dietetics, Food, and Nutrition, Earth Science, Economics, Economics and Mathematics, Environmental Science, Exercise Science, Geography, Geology, Health Education and Promotion, Health Education N-12, Health Services Administration, Italian American Studies, Linguistics, Mathematics, Nursing, Physics, Political Science, Psychology, Recreation Education, Social Work, Sociology, Speech Pathology and Audiology, Therapeutic Recreation.
Pre/ Co	Declared major and either completion of 60 credits or an Associate's
Requisites	Degree.
Credits	3
Hours	3
Liberal Arts	[X] Yes [] No

Course 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>:

These majors were inadvertently omitted from the list of majors who cannot use this course to fulfill the College Option requirement.

5. Date of Undergraduate Curriculum Committee approval: November 13, 2019

UNDERGRADUATE CURRICULUM COMMITTEE

CURRICULUM CHANGE

1. Type of Change: Note

2. From: Strikethrough the changes

2. From: Striket	nrough the changes			
Department(s)	Provost			
Career	[X] Undergraduate [] Graduate			
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial			
Level				
Subject Area	LEH			
Course Prefix	LEH 352			
& Number				
Course Title	Studies in Literature			
Description	Selected topics in literature. NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet. NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Classics, Comparative Literature, English, French, German, Greek, Greek and Latin, Hebraic and Judaic Studies, Italian, Latin, Russian and Spanish.			
Pre/ Co	Declared major and either completion of 60 credits or an Associate's			
Requisites	Degree.			
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 Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society 			

Scientific World

3. To: Underline the changes

Department(s)	Provost			
Career	[X] Undergraduate [] Graduate			
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial			
Level				
Subject Area	LEH			
Course Prefix	LEH 352			
& Number				
Course Title	Studies in Literature			
Description	Selected topics in literature. NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet. NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Classics, Comparative Literature, English, French, <u>French Teacher Education 7-12</u> , German, Greek, Greek and Latin, Hebraic and Judaic Studies, Italian, <u>Italian Teacher</u> <u>Education 7-12</u> , Latin, Russian Spanish and <u>Spanish Teacher</u>			
Pre/ Co	Education 7-12. Declared major and either completion of 60 credits or an Associate's			
Requisites	Degree.			
Credits	3			
Hours	3			
Liberal Arts	[X] Yes [] No			
Course Attribute (e.g. Writing Intensive, WAC, etc)	NĂ			
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 department and Major/Program)</u>:

These majors were inadvertently omitted from the list of majors who cannot use this course to fulfill the College Option requirement.

5. Date of Undergraduate Curriculum Committee approval: November 13, 2019

UNDERGRADUATE CURRICULUM COMMITTEE

CURRICULUM CHANGE

1. Type of Change: Note

2. From: Strikethrough the changes

	Brought
Department(s)	
Career	[X] Undergraduate [] Graduate
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial
Level	
Subject Area	LEH
Course Prefix	LEH 354
& Number	
Course Title	Studies in Historical Studies
Description	Selected topics in historical studies. NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet. NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Africana Studies, American Studies, History, Latin American and Caribbean Studies, Latino Studies.
Pre/ Co	Declared major and either completion of 60 credits or an Associate's
Requisites	Degree.
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
	English Composition
	English Composition Mathematics
	English Composition Mathematics
	English Composition Mathematics Science
	English Composition Mathematics Science Flexible
	English Composition Mathematics Science Flexible World Cultures
	English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity

Scientific World

3. **To:** <u>Underline</u> the changes Department(s) Provost Career [X] Undergraduate [] Graduate [X] Regular [] Compensatory [] Developmental [] Remedial Academic Level Subject Area LEH Course Prefix LEH 354 & Number Course Title Studies in Historical Studies Description Selected topics in historical studies. NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet. NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Africana Studies, American Studies, History, History (Teacher Education), Latin American and Caribbean Studies, Latino Studies. Pre/ Co Declared major and either completion of 60 credits or an Associate's Requisites Degree. Credits 3 3 Hours [X] Yes Liberal Arts No Course NA Attribute (e.g. Writing Intensive, WAC, etc) General ___x_Not Applicable Education 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 department and Major/Program)</u>:

These majors have changed their names.

5. Date of Undergraduate Curriculum Committee approval: November 13, 2019

DEPARTMENT OF MUSIC, MULTIMEDIA, THEATRE, AND DANCE

CURRICULUM CHANGE

1. Type of change: New Course

2.

2.			
Department(s)	Music, Multimedia, Theatre, and Dance		
Career	[X] Undergraduate [] Graduate		
Academic	[X] Regular [] Compensatory [] Developmental [] Remedial		
Level			
Subject Area	Performance		
Course Prefix	MSP 200		
& Number			
Course Title	Guitar Ensemble		
Description	Development of skills in ensemble playing in a setting that exposes		
	the student to the various roles guitar players are expected to master. Musical literacy is stressed.		
Pre/ Co	Departmental permission.		
Requisites			
Credits	1		
Hours	2		
Liberal Arts	[] Yes [X] No		
Course	NA		
Attribute (e.g.			
Writing			
Intensive,			
WAC, etc)			
General	_xNot 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:

The class addresses the preponderance of guitarists in Lehman's Music, Multimedia, Theater & Dance Dept., as well as the college's overall population. The rehearsal time would largely be spent on reading musical charts (parts/scores) and working on an ensemble sound. This work would lead to end of semester performances of material featuring various guitar styles.

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

-Read musical material that translates into lead and various accompaniment parts in the vernacular of guitar expression

-Demonstrate sensitivity to the role of dynamics in ensemble playing

-Demonstrate improved awareness of compositional structures

-Demonstrate understanding of several musical traditions including classical, jazz, pop, r&b, blues and rock n' roll.

5. Date of Departmental Approval: October 25, 2019

DEPARTMENT OF SOCIOLOGY

CURRICULUM CHANGE

Name of Program and Degree Award: Sociology, Minor Effective Term: Fall 2020

1. <u>Type of Change</u>: Change in description of minor requirements

2. <u>From</u>:

The Minor in Sociology consists of five courses totaling 15 credits. At least three courses must be at the 300-level or higher.

3. <u>To</u>:

The Minor in Sociology consists of five courses totaling <u>at least</u> 15 credits. At least <u>9</u> <u>credits</u> must be at the 300-level or higher.

4. Rationale:

This change updates the bulletin description of the sociology minor to account for the fact that the department offers some courses that are 1-credit courses and some 300 level courses that are 4-credit. The update clarifies that 5 courses and at least 15 credits are required for the minor.

Date of departmental approval: September 18, 2019



Library Technology and Telecommunications Senate Committee Meeting

Meeting Date: December 4, 2019 Meeting Location: Carman 162

Attendance: Ron Bergmann, Stephen Castellano, Sherry Deckman, Michele Ehrenpreis, John DeLooper, Susan Ko, Donna McGregor, Joseph Mohorcich, Kenneth Schlesinger, Jennifer Van Allen.

Excused: Raymond Diaz, Jennifer McCabe

Student Senator Representatives: Madelin Arias Bueno and Claudio Bautista

Library Report:

** Library announces 24-Hour Study Hall for Final Exams-December 6th-20th. Library Study Hall is a cooperative effort between the Library and Public Safety.

** Please be mindful of Library Etiquette: Keep Conversations quiet and respectful. If working in groups, please request Study Room. Leave your cellphones on vibrate.

** Library will offer Amnesty on overdue books between December 12th-31st. Return your overdue books and your Library Fines will be forgiven. You must return your materials to the Circulation Desk. Library Amnesty is in effect for books only. Laptops Pads and Reserve Books are not included

Division of Information Technology

** Planning continues for the migration of faculty and staff email to Microsoft Office 365. Initial migrations are scheduled to begin in the spring 2020 semester. Faculty and staff are encouraged to upgrade office computers to Office 2019. This task may be accomplished without assistance by going to your SOFTWARE CENTER icon (Windows) or Self Service icon (Macs) and launch the upgrade, which takes about 1hour. If you need assistance, please contact the Help Desk. Workshops will be offered for the various Office 365 tools in the spring semester.

** The Lehman Lightning Chatbot pilot was launched a few weeks ago and the response has been favorable. Students at Lehman and other five other CUNY colleges are experimenting with the chatbot. The IT Division welcomes your feedback as we plan for the spring semester and encourages the Lehman community to give the chatbot a try. ** The entire CUNY Community is entitled to 5-Free downloads of Office 2019 Pro-Plus. GOOGLE: CUNY DOWNLOAD MICROSOFT OFFICE for step-by-step instructions

** The Tech Fee Process is underway. The window for proposals will close soon, so please speak to your department chair or dean if you have not already done so. The tech fee committee comprised of students, faculty and administrators will start meeting in the spring semester.

Blackboard Report

** Blackboard will undergo an Upgrade on December 29th-30th. During this time period, Bb will be unavailable. There will be no major changes from the user perspective. Bb will function just the same as it does now.

** On November 12th and 13th and 18th and 19th I participated in User Acceptance Testing to ensure that there are no surprises with the upgrade. No serious issues were uncovered during the testing process

Online Education

** Online Education announces two webinars: **Timesaving Techniques for Course Planning and Preparation with Niki Fayne** on December 12th

** On December 13th, **Designing For Larger Classes-Basic Principles and Models.** For more information, please contact the Office of Online Education

Additional Note: The Library Technology Committee would like to acknowledge the Governance Committee for working us to discuss development of a draft for Listserv Guidelines. We will draft a Resolution to Present to the Senate at the February 2020 meeting.

Respectfully submitted,

Stephen Castellano Chair, Library Technology and Telecommunications Committee Dec. 11, 2019

Lehman Senate Budget Committee Report

Based on committee meeting on 11/20/2019

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

Senators	FP&B members	Administration	Students
Haiping Cheng	Brian Murphy	Peter Nwosu	Azeez Alimi
Mia Budescu	Dene Hurley	Rene Rotolo	Steven Abreu
Alexander Nunez Terres	Paula Loscocco	Bethania Ortega	Smana Ali
Alison Behrman	Marie Marianetti	Melissa Kirk	
Rick DesRochers	Wesley Pitts		Guests
Ruth Wangerin	Cal Mazza		Ryan Raaum

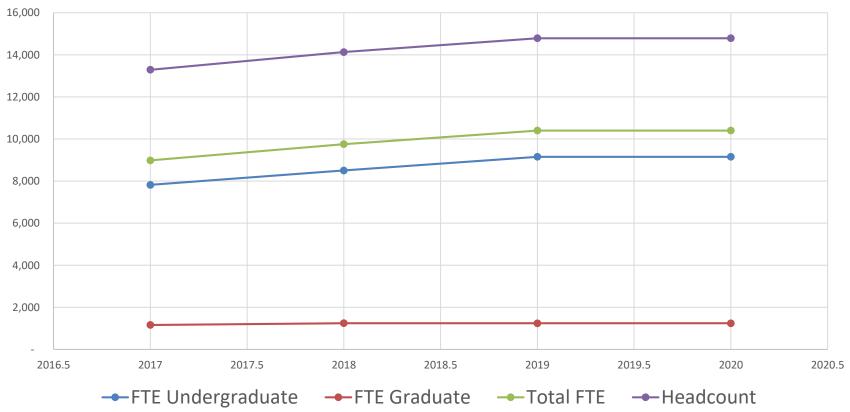
The Budget committee meeting was called to order at 1:40 pm by Haiping Cheng on Nov. 20, 2019, in Shuster 336.

- > Approve minutes: Minutes of 9/25/2019 meeting was approved unanimously.
- > Budget update: Budget Director Bethania Ortega.
 - > FY2020 1st Q update: Very similar to the original plan. Waiting for analysis of the impact of PSC-CUNY contract.
- > Academic Affairs Report: Provost Peter Nwosu
 - Progress on ECP search
 - Mass adjunct appointments
 - > Academic initiative (\$310K): curriculum innovation, marketing graduate program, etc
 - Strategic investment (\$386K): for 5 new Lecture lines
- □ Longterm personnel trend: Budget Director Bethania Ortega: details on following slides

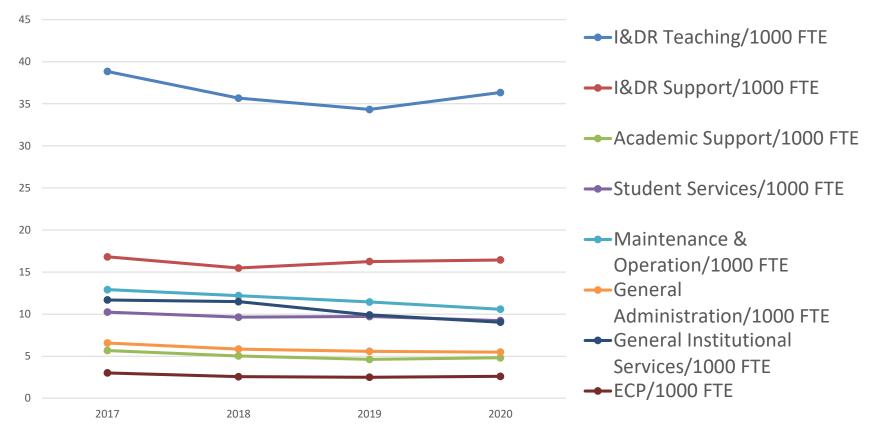
Next Budget meeting, Feb. 26, 2020 1:30-3:00pm, S-336

Annual Average Enrollment	FY 17	FY 18	FY 19	FY 20
FTE Undergraduate	7,820	8,505	9,156	9,156
FTE Graduate	1,165	1,249	1,244	1,244
Total FTE	8,985	9,754	10,400	10,400
Headcount	13,290	14,130	14,787	14,787

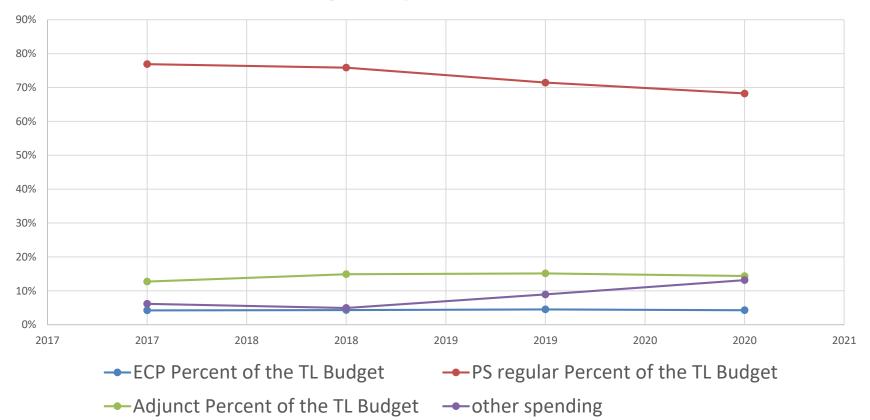
FY 2017-2020 Total Enrollment trend



FY2017-2020 Personnel Trend



% of Total Budget Expense Trend FY2017-2020



Happy Holidays

Academic Assessment Council

Mission

The Academic Assessment Council (AAC) collects academic assessment information at the institutional, program and course levels, including General Education and Institutional Learning Outcomes (ILOs); monitors assessment activity; fosters cross-program collaboration on assessment; works with departments, programs, and faculty in developing and implementing assessment plans and communicating assessment findings with appropriate stakeholders; facilitates the use of assessment results in Lehman College's governance, planning, resource allocation, and institutional learning outcome development; devises professional development activities and materials for faculty; and, advises on the development of broader academic assessment policy to promote student achievement and curricular and pedagogical improvement.

MEMBERS:

Claudette Gordon	Nursing	
Sharon Jordan	Art	
Donna McGregor	Chemistry	
Zoila Morell	Early Childhood and Childhood Education	
Anne Rothstein	Early Childhood and Childhood Education	
Devrim Yavuz	Sociology	
Evan Senreich	Social Work	
Ex officio:		
Stanley Bazile	Student Affairs	
Jonathan Gagliardi	Institutional Research, Planning, and	
	Assessment	
Jane MacKillop	School of Continuing Education and	
	Professional Studies	
Vincent Prohaska	Academic Programs, Convener	
Donald Sutherland	Academic Programs	

Timeline

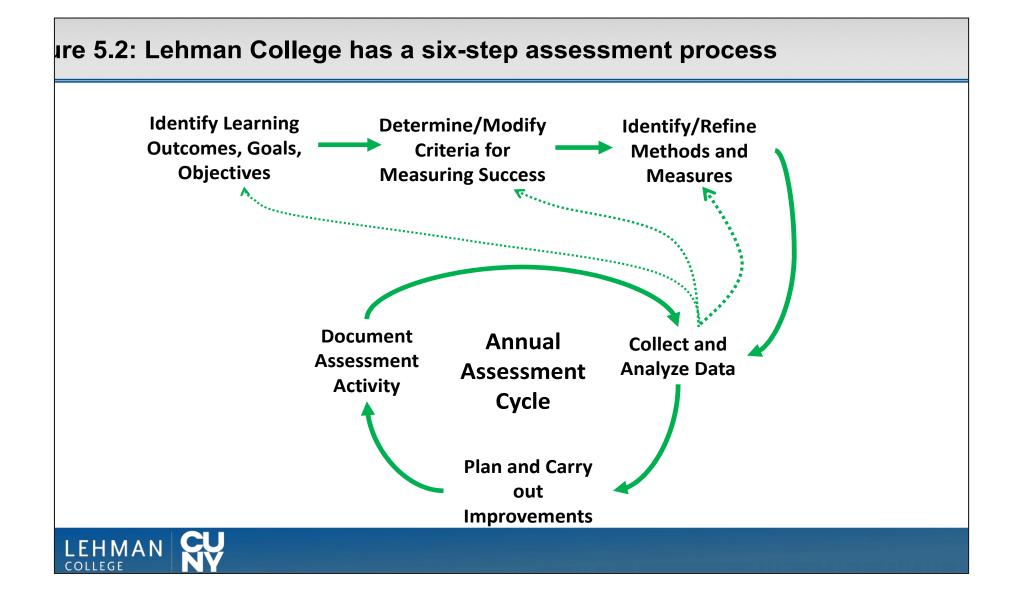
First MeetingMarch 21, 2019Ad Hoc Senate CommitteeMay 1, 2019Assessment WorkshopMay 6, 2019Dr. SwaratSeptember 17, 2019Revised Annual Program AssessmentSeptember 17, 2019Dropbox not TaskStreamTemplate & Use of 6-Step ProcessFeedback & Progress ReportsKarch 21, 2019

Timeline

Software Demo Submit Proposal for Senate Standing Committee on Assessment Assessment Workshop 6-Step Process November 13, 2019 November 20, 2019

November 25, 2019

Institutional Effectiveness Plan – draft November 30, 2019 Assessment Workshops Spring, 2020 Supplemental Report to MSCHE March 1, 2020



Institutional Learning Domains Educated, Empowered, and Engaged.

Institutional Learning Outcomes (ILO)

- 1. Utilize critical thinking skills
- 2. Demonstrate competence within at least one discipline
- 3. Demonstrate skills in quantitative reasoning, information literacy, and research
- 4. Demonstrate outstanding communication skills in diverse media
- 5. Demonstrate multicultural, global and ethical awareness of diverse peoples and communities
- 6. Demonstrate the ability to work collaboratively as part of a team
- 7. Demonstrate the potential for leadership

