LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF CHEMISTRY

CURRICULUM CHANGE

Name of Program and Degree Award: Chemistry BA

Hegis Number: 1905 Program Code: 34241 Effective Term: Fall 2015

1. **Type of Change**: Creation of a second concentration in the BA degree

2. From: Chemistry, B.A. (54-59 Credit Major)

This major is recommended for those students in chemistry who are preparing for (1) admission to medical, veterinary, or dental school; (2) certification as secondary school teachers of chemistry; or (3) positions in the chemical industry. The required courses and credits are distributed as follows:

Credits (54-59)

- 34-37 In chemistry: CHE 166-167 (or equivalent), 168-169, 232-233, 234-235, 249, 342, 344, and 345, and either CHE 347 or 449.
- 20-22 In mathematics and physics: MAT 175-176, MAT 226, and either PHY 166-167 or 168-169.

3. To: Chemistry, B.A. (56-61 Credit Major)

The Chemistry BA is comprised of a core of 36-38 credits and an area of concentration in chemistry or biochemistry. This major is recommended for those students in chemistry who are preparing for (1) admission to medical, veterinary, or dental school; (2) certification as secondary school teachers of chemistry; or (3) positions in the chemical industry.

Chemistry Core (required) (36-38 credits)

- 20 In chemistry: CHE 166-167 (or equivalent), 168-169, 232-233, 234-235.
- 16-18 In mathematics and physics: MAT 175-176, and either PHY 166-167 or 168-169.

Biochemistry Concentration (23 credits)

15 In chemistry: CHE 334, 444, 446, 447, and one 3 credit elective Chemistry

course at the 200 level or above, excluding 391 and 491.

8 <u>In biology: BIO 166-167.</u>

Chemistry Concentration (20-22 credits)

- 16-18 In chemistry: 249, 342, 344, 345, 347 and one 3 credit elective Chemistry course at the 200 level or above, excluding 391 and 491.
- 4 In mathematics: MAT 226.

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

The Chemistry Department has two BS degree programs -- one in Chemistry and one in Biochemistry. The department also offers a BA degree in Chemistry but no concentration in Biochemistry. The BA in Biochemistry will complement the BS in biochemistry and give students to choice of an intensive science degree (BS) or a liberal arts science degree (BA) in biochemistry. The BA in Chemistry with a concentration in Biochemistry will allow students to pursue a liberal arts degree that prepares them broadly with a liberal education in the context of a rigorous science program. The BA in chemistry with a concentration in biochemistry will still prepare students for subsequent graduate work in chemistry or biochemistry. Students can complement their degree requirements with specific course work if desired. The BA in chemistry with a concentration in biochemistry will also prepare students to pursue post-graduate work in medicine, dentistry, veterinary medicine or other health related areas and simultaneously provide time for them to acquire internship experiences necessary for application to these programs.

5. Date of departmental approval:

March 12, 2015

Change or Adapt a Registered Program

Use the <u>Request to Change or Adapt a Registered Program</u> form to request program changes that require approval by the State Education Department (see chart).* For **programs that are registered jointly** with another institution, all participating institutions must confirm support for the changes.

Exceptions:

- To change a registered professional licensure program or add a license qualification to an existing program, contact the Office of the Professions for guidance.
- To change a registered teacher certification or educational leadership certification program or add a certificate qualification to an existing program, use the education program change form.

Changes and Adaptations Requiring State Education Department Approval

Changes in Program Content (all programs)

- 1. *Any* of the following substantive changes:
 - Cumulative change from the Department's last approval of the registered program of one-third or more
 of the minimum credits required for the award (e.g., 20 credits in an associate degree program)
 - Changes in the program's focus or design (e.g., eliminating management courses in a business administration program), including a change in the program's major disciplinary area
 - Adding or eliminating an option or concentration
 - Eliminating a requirement for completion, including an internship, clinical, cooperative education, or other work-based experience
 - Altering the liberal arts and science content in a way that changes the degree classification, as defined in Section 3.47(c)(1-4) of <u>Regents Rules</u>

Other Changes (all programs)

- 2. Program title
- 3. Program award (e.g., change in degree)
- 4. Mode of delivery (**Note**: if the change involves adding a **distance education format** to a registered program, please complete the distance education application.)
- 5. Discontinuing a program
- 6. A format change that alters the program's financial aid eligibility (e.g., from full-time to part-time, or to an abbreviated or accelerated semester)
- 7. A change in the total number of credits of any certificate or advanced certificate program

Establishing New Programs Based on Existing Registered Programs

- 8. Creating a dual-degree program from existing registered programs
- 9. Creating a new program from a concentration/track in an existing registered program

PLEASE NOTE:

Establishing an existing program at a new location requires new registration of the program. If the requested action changes the program's major disciplinary area, master plan amendment may be needed if the revised program represents the institution's first program in that major subject area, at that degree level. If a requested **degree title** is not authorized for an institution chartered by the Board of Regents, charter amendment will be needed.

^{*} **CUNY and SUNY** institutions: contact System Administration for guidance.



NEW YORK STATE EDUCATION DEPARTMENT

Office of Higher Education—Office of College and University Evaluation 89 Washington Avenue, Albany, NY 12234 (518) 474-2593 Fax: (518) 486-2779 ocueinfo@mail.nysed.gov http://www.highered.nysed.gov/ocue/

Request to Change or Adapt a Registered Program				
Item	Response (type in the requested information)			
Institution name and address	Lehman College of the City University of New York *Additional information: *Specify campus where program is offered, if other than the main campus:			
Identify the program you wish to change	Program title: Chemistry <u>Award</u> (e.g., B.A., M.S.): BA			
	Credits: 54-59 HEGIS code: 1905 Program code: 34241			
Contact person for this proposal	Name and title: Professor Pamela Mills, Chair Telephone: 718-960-8743 Fax: E-mail: Pamela.mills@lehman.cuny.edu			
CEO (or designee) approval	Name and title: Signature and date:			
Signature affirms the institution's commitment to support the program as revised.	If the program will be registered jointly¹ with another institution, provide the following information: Partner institution's name: Name and title of partner institution's CEO: Signature of partner institution's CEO:			

- For **programs that are registered jointly** with another institution, all participating institutions must confirm their support of the changes.
- To change a registered professional licensure program or add a license qualification to an existing program, contact the Office of the Professions for guidance.
- To change a registered teacher certification or educational leadership certification program or add a certificate qualification to an existing program, use the education program change form.
- If the change involves **establishing an existing registered program at a new location**, complete a new registration application for the proposed program.

¹ If the partner institution is non-degree-granting, see CEO Memo 94-04 at www.highered.nysed.gov/ocue/ceo94-04.htm.

Check all changes that apply and provide the requested information.

Changes in Program Content (Describe and explain all proposed changes; provide a side-by-side comparison of the existing and newly modified programs.) [] Cumulative change from the Department's last approval of the registered program that impacts onethird or more of the minimum credits required for the award (e.g., 20 credits in an associate degree program) [] Changes in a program's focus or design Adding or eliminating an option or concentration [] Eliminating a requirement for program completion [] Altering the liberal arts and science content in a way that changes the degree classification, as defined in Section 3.47(c)(1-4) of Regents Rules If new courses are being added as part of the noted change(s), provide a syllabus for each new course and list the name, qualifications, and relevant experience of faculty teaching the course(s). Syllabi should include a course description and identify course credit, objectives, topics, student outcomes, texts/resources, and the basis for determining grades. Other Changes (describe and explain all proposed changes) [] **Program title** [] **Program award** [] Mode of Delivery (Note: if the change involves adding a distance education format to a registered program, please complete the distance education application.) [] **Discontinuing a program**: indicate the date by which the program will be discontinued.² [] Format change (e.g., from full-time to part-time, or to an abbreviated or accelerated semester) a) Indicate proposed format: b) Describe availability of courses and any change in faculty, resources, or support services: c) Use the Sample Program Schedule to show the sequencing and scheduling of courses in the program.

² If any students do not complete the program by the proposed termination date, the institution must request an extension of the registration period for the program or make other arrangements for those students.

Establishing New Programs Based on Existing Registered Programs

[] Creating a dual-degree program from existing registered programs

a) Complete the following table to identify the existing programs:

	Program Title	Degree Award	Program Code
Program 1			
Program 2			

- b) Proposed dual-degree program (title and award):3
- c) Courses that will be counted toward both awards:
- d) Length of time for candidates to complete the proposed program:
- e) Use the Sample Program Schedule to show the sequencing and scheduling of courses in the dualdegree program.

[] Creating a new program from a concentration/track in an existing program.

If the new program is based *entirely* on existing courses in a registered program, provide the current program name, program code, and the following information:

Note: this abbreviated option applies only if a master plan amendment is NOT required **and** there are no new courses or changes to program admissions and evaluation elements. If these conditions are not met, submit a new registration application for the proposed program.

- a) Information from the Application for Registration of a New Program_form: cover page (page 1), Sample Program Schedule form, and faculty information charts (full-time faculty, part-time faculty, and faculty to be hired)
- b) Brief description of the proposed program and rationale for converting the existing coursework to a separately registered program:
- c) Expected impact on existing program:
- d) Adjustments the institution will make to its current resource allocations to support the program:
- e) Statement confirming that the admission standards and process and evaluation methods are the same as those in the existing registered program:

Note: if the change involves **establishing an existing registered program at a new location**, complete a new registration application for the proposed program.

³ Only candidates with the capacity to complete the requirements of both degrees shall be admitted to a dual-degree program.

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DEPARTMENT OF CHEMISTRY - Add a concentration to an existing major

Side-by-Side Comparison

From: Chemistry, B.A. (54-59 Credit Major)

This major is recommended for those students in chemistry who are preparing for (1) admission to medical, veterinary, or dental school; (2) certification as secondary school teachers of chemistry; or (3) positions in the chemical industry. The required courses and credits are distributed as follows:

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To: Chemistry, B.A. (56-62 Credit Major)

The Chemistry BA is comprised of a core of 36-38 credits and an area of concentration in chemistry or biochemistry. This major is recommended for those students in chemistry who are preparing for (1) admission to medical, veterinary, or dental school; (2) certification as secondary school teachers of chemistry; or (3) positions in the chemical industry.

Chemistry Core (required) (36-38 credits)

20: In chemistry: CHE 166-167 (or equivalent), 168-169, 232-233, 234-235.

16-18: In mathematics and physics: MAT 175-176, and either PHY 166-167 or 168-169.

Biochemistry Concentration (24 credits)

15: In chemistry: CHE 334, 444, 446, 447, and one 3 credit elective Chemistry course at the 200 level or above, excluding 391 and 491. 8: In biology: BIO 166-167.

Chemistry Concentration (20-22 credits)

16-18: In chemistry: 249, 342, 344, 345, 347 and one 3 credit elective Chemistry course at the 200 level or above, excluding 391 and 491. 4: In mathematics: MAT 226.