

The City University of New York
CURRICULUM DATA TRANSMITTAL SHEET

DEPARTMENT: **PHYSICAL SCIENCES**

DATE: **Spring 2019**

Title of Course or Degree Change: **A.S. CHEMISTRY**

Change(s) Initiated: (Please Check)

- | | |
|---|--|
| <input type="checkbox"/> Closing of Degree | <input checked="" type="checkbox"/> Change in Degree or Certificate Requirements |
| <input type="checkbox"/> Closing of Certificate | <input type="checkbox"/> Change in Degree Requirements (adding concentration) |
| <input type="checkbox"/> New Certificate Proposal | <input type="checkbox"/> Change in Pre/Co-Requisite |
| <input type="checkbox"/> New Degree Proposal | <input type="checkbox"/> Change in Course Designation |
| <input type="checkbox"/> New Course | <input type="checkbox"/> Change in Course Description |
| <input type="checkbox"/> New 82 Course | <input type="checkbox"/> Change in Course Title, Numbers Credit and/or Hour |
| <input type="checkbox"/> Deletion of Course | <input type="checkbox"/> Change in Academic Policy |
| | <input type="checkbox"/> Pathways Submission: |
| | <input type="checkbox"/> Life and Physical Science |
| | <input type="checkbox"/> Math and Quantitative Reasoning |
| | <input type="checkbox"/> A. World Cultures and Global Issues |
| | <input type="checkbox"/> B. U.S. Experience in its Diversity |
| | <input type="checkbox"/> C. Creative Expression |
| | <input type="checkbox"/> D. Individual and Society |
| | <input type="checkbox"/> E. Scientific World |

Other (please describe):


PLEASE ATTACH PERTINENT MATERIAL TO ILLUSTRATE AND EXPLAIN ALL CHANGES

I. DEPARTMENTAL ACTION

Action by Department &/or Departmental Curriculum Committee, if required:

Date approved: 3/14/19

Signature, Committee Chairperson:



Signature, Department Chair:



Date: 3/14/19.

Appended are:

1. Proposed Degree Requirements A.S. Chemistry
2. Proposed 4 semester Degree Map A.S. Chemistry
3. List of Proposed Changes A.S. Chemistry
4. Current catalog description A.S. Chemistry (Marked-up to show add/drop changes)
5. Proposed catalog description A.S. Chemistry

Reason for Changes:

To adhere to and to comport with changes to: Math Placement; Math Ready; Math Ready to Calculus Ready sequence; Calculus Ready through Calculus sequence; Hidden Pre-requisite; Degree in 60 Credits; and Degree in 4 Academic Semesters policies and practices.

Degree Requirement A.S. Chemistry

CUNY's General Education requirements: [excluding math and science requirement]

One year of English Composition: ENG 12 & ENG 24 (6 crs.)

Group A: One semester World (3 crs.)

Group B: One semester United States (3 crs.)

Group C: One semester Creative (3 crs.)

Group D: One semester Individual (3 crs.)

18 credits

Department Degree Requirements:

Physical Sciences Requirements:

CHM 1100 – General Chemistry I (4 crs.)

CHM 1200 – General Chemistry II (4 crs.)

CHM 3100 – Organic Chemistry I (5 crs.)

CHM 3200 – Organic Chemistry II (5 crs.)

PHY 1300 – Advanced General Physics I (4 crs.)

PHY 1400 – Advanced General Physics II (4 crs.)

26 credits

Mathematics Requirements:

Three of the following:

MAT 0900 Algebra (3 crs)

MAT 1000 Trigonometry (3 crs)

MAT 1400 Pre-Calculus (3 crs) [Recommended]

MAT 1500 Calculus I (3 crs) [Recommended]

MAT 1600 Calculus II (3 crs) [Recommended]

09 credits

Advanced Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI (7 crs.)

07 credits

Total 60 credits

AS Chemistry Degree Map

CHM, ENG, MAT development (if required) 0 crs.

<p><u>Semester 1 (16 Credits)</u></p> <ul style="list-style-type: none"> • CHM11 - Chemistry I 4 crs. • ENG12- English Composition I 3 crs. • MAT3 crs. • Group A or B or C or D 3 crs. • Group A or B or C or D 3 crs. 	<p><u>Semester 2 (16 Credits)</u></p> <ul style="list-style-type: none"> • CHM12- Chemistry II 4 crs. • ENG24 English Composition II 3 crs. • MAT [MAT 1500 Recommended] 3 crs. • Group A or B or C or D 3 crs. • Group A or B or C or D 3 crs.
<p><u>Semester 3 (15 credits)</u></p> <ul style="list-style-type: none"> • CHM 31 Organic Chemistry I 5 crs. • PHY13 Advanced Physics I 4 crs. • MAT [MAT 1600 Recommended] 3 crs. • Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI 3 crs. 	<p><u>Semester 4 (13 credits)</u></p> <ul style="list-style-type: none"> • CHM 32 Organic Chemistry II 5 crs. • PHY14 Advanced Physics II 4 crs. • Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI 4 crs.

Add/Delete/Change	A.S. CHEMISTRY	
	HEGIS: 5619.00	
	PROGRAM CODE: 01043	
	CUNY CORE	CREDITS
CHANGE	REQUIRED CORE: (4 Courses, 14 13 Credits)	44 13
	When Required Core Courses are specified for a category, they are required for the major	
	ENG 1200 - English Composition I	3
	ENG 2400 - English Composition II	3
	Mathematical and Quantitative Reasoning*:	04 3
ADD	MAT 900 - College Algebra or	
ADD	MAT 9A0 - Algebra for STEM Majors or	
ADD/CHANGE (CREDITS)	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
CHANGE (CREDITS)	MAT 1500 - Calculus I	
	Life and Physical Sciences*:	4
	CHM 1100 - General Chemistry I	
	FLEXIBLE CORE: (6 Courses, 20 Credits)	20
	When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.	
	A. World Cultures and Global Issues	
	B. U.S. Experience In Its Diversity	
	C. Creative Expression	
	D. Individual & Society	
	E. Scientific World*:	
DELETE	MAT 1600 - Calculus II	
ADD	PHY 1300 - Advanced General Physics I	
	CHM 1200 - General Chemistry II	
	DEPARTMENT REQUIREMENTS (4 7 Courses, 18 26-27 Credits)	
ADD	Additional Physical Sciences Requirements (3 Courses, 14 Credits)	
	CHM 3100 - Organic Chemistry I	5
	CHM 3200 - Organic Chemistry II	5
DELETE	PHY 1300 - Advanced General Physics I	04
	PHY 1400 - Advanced General Physics II	4
ADD	Additional Mathematics Requirements (2 Courses, 6 Credits)	6
ADD	Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	
ADD	MAT 1000 - College Trigonometry^A	
ADD	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
ADD	MAT 1500 - Calculus I (Recommended)	
ADD	MAT 1600 - Calculus II (Recommended)	
ADD	MAT 2100 - Calculus III	
ADD	MAT 5500 - Differential Equations	
ADD	MAT 5600 - Linear Algebra	

A.S. CHEMISTRY	
HEGIS: 5619.00	
PROGRAM CODE: 01043	
CUNY CORE	CREDITS
REQUIRED CORE: (4 Courses, 13Credits)	13
When Required Core Courses are specified for a category, they are required for the major	
ENG 1200 - English Composition I	3
ENG 2400 - English Composition II	3
Mathematical and Quantitative Reasoning*:	3
MAT 900 - College Algebra or	
MAT 9A0 - Algebra for STEM Majors or	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics or	
MAT 1500 - Calculus I	
Life and Physical Sciences*: CHM 1100 - General Chemistry I	4
FLEXIBLE CORE: (6 Courses, 20 Credits)	20
When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.	
A. World Cultures and Global Issues	
B. U.S. Experience In Its Diversity	
C. Creative Expression	
D. Individual & Society	
E. Scientific World*:	
PHY 1300 - Advanced General Physics I	
CHM 1200 - General Chemistry II	
DEPARTMENT REQUIREMENTS (7Courses, 26 - 27 Credits)	
Additional Physical Sciences Requirements (3 Courses, 14 Credits)	
CHM 3100 - Organic Chemistry I	5
CHM 3200 - Organic Chemistry II	5
PHY 1400 - Advanced General Physics II	4
Additional Mathematics Requirements (2 Courses, 6 Credits)	6
Select Two (2) additional courses beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:	
MAT 1000 - College Trigonometry^	
MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics (Recommended)	
MAT 1500 - Calculus I (Recommended)	
MAT 1600 - Calculus II (Recommended)	
MAT 2100 - Calculus III	
MAT 5500 - Differential Equations	
MAT 5600 - Linear Algebra	
Additional Science and Mathematics Electives (2 Courses, 6 - 7 Credits)	
Elective Credits in CHM, CS, EGR, EPS, MAT, PHY, or SCI	

