

**Biochemistry Program Sheet**

**Major/Academic Plan: CHEM-BS**

*For a CCNY degree in Biochemistry complete the following courses*

**DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY PLAN = BIOCHEMISTRY GRADUATION CHECK**

Student Name: \_\_\_\_\_

Student ID#: \_\_\_\_\_

<u>Science and Math Requirements</u>	<u>Credits</u>	<u>Grade</u>	<u>Term (Fa, Sp, or Su) &amp; Year taken</u>
Chem 10301 General Chemistry I & Lab	4	_____	_____
Chem 10401 General Chemistry II & Lab	4	_____	_____
Math 20100 Anal. Geom. & Calculus I	4	_____	_____
Math 21200 Anal. Geom. & Calculus II	4	_____	_____
Phys 20700 General Physics I	4	_____	_____
Phys 20800 General Physics II	4	_____	_____
Bio 10100 General Biology I	4	_____	_____
Bio 10200 General Biology II	4	_____	_____
	[32 Total]		
Bio 22900 Cell & Molecular Biology <b>OR</b>	4	_____	_____
Bio 20600 Introduction to Genetics	4	_____	_____
Math 21300 Calc III <b>OR</b>	4	_____	_____
CHEM 250 Mathematics for PChem	2	_____	_____

[6 or 8 Total]

**Chemistry Major Requirements (60% of these courses must be taken at CCNY)**

24300 Quantitative Analysis	4	_____	_____
26100 Organic Chemistry I	3	_____	_____
26200 Organic Chemistry Lab I	2	_____	_____
26300 Organic Chemistry II	3	_____	_____
33000 Physical Chemistry I	4	_____	_____
37400 Organic Chemistry Lab II	3	_____	_____
32002 Biochemistry I	3	_____	_____
32004 Biochemistry I Lab	2	_____	_____
43500 Physical Biochemistry	5	_____	_____
48005 Biochemistry II	3	_____	_____

[32 Total]

**Recommended higher level classes (not major requirements):**

44000 Journey to the center of the cell	3	_____	_____
44200 RNA Biochemistry & Mol. Bio.	3	_____	_____

**Additional Chemistry Courses (Optional, some required for ACS certification)**

Honors Research or Independent Studies e.g. CHEM 30100, 30200, 30300,  
e.g. CHEM 30100, 30200, 30300, 31001, 31002, 31003, 31004

or other upper-level courses 425 required for ACS	<u>Credits</u>	<u>Grade</u>	<u>Term/Year taken</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Advisor's Remarks: \_\_\_\_\_

This student **has completed/ is completing** (circle one) the major requirements for a degree in Chemistry.

This student **will complete/will not complete** (circle one) all the requirements for an ACS certified degree (if the student will complete the requirements, then please send a copy of this graduation check to Denise Addison).

Date: \_\_\_\_\_

Advisor's Signature: \_\_\_\_\_

## Instructions to complete the Graduation Check form.

1. Write the name of the student as it appears on the transcript and include the full EMPLID number.
2. For each course, enter the grade and the term (FA, SP, or SU) and year that the course was taken. If a course was transferred from another college, enter a grade of T (for transfer) and leave the term line blank. If a course was exempted due to AP credit from high school, enter AP for the grade and leave the term line blank.
3. If a course does not transfer properly, please give a comment if you are willing to approve an exception. For example, many students transfer CHEM 26200 instead of CHEM 27200. For transfer students, this is acceptable even though it is a 2 credit course instead of a 3 credit course.
4. Check to make sure that the GPA for Chemistry classes is greater than or equal to 2.0.
5. Check to make sure the student completed 120 credits total.
6. Check the student meets the **Residency requirement** by completing at least 30 credits at CCNY, as well as at least 60% of their major at CCNY. This means that typically, transfer students with more than 40 transfer credits may not permit any courses during their last 30 credits.
7. Substitutions for some courses are permitted (common example, Physics 203 and 204 for 207 and 208 for transfer students and Chemistry 26200 for 27200 for transfer students)
8. If a student has repeated a course, only put the grade and semester and year taken for the highest grade.
9. After a student applies for graduation, then the advisor must complete the graduation check for the major

**For ACS certification, the student must complete the following:**

### **General Chemistry**

CHEM 10301 and 10401

### **Foundation Courses**

CHEM 24300, 26100, 33000, 32002, 42500

### **Advanced Courses**

*Standard Chemistry:* CHEM 26300, 33200

*Biochemistry:* CHEM 43500, 48005

### **Total laboratory hours (400 h not including General Chemistry)**

*Standard Chemistry:* CHEM 24300 (60 h), 27200 (75 h), 37400 (75 h), 33100 (60 h), 43400 (75 h),  
Independent Study/Honors Research (minimum 55 h which is approximately 1 semester for 3 credits)

*Biochemistry:* CHEM 24300 (60 h), 27200 (75 h), 37400 (75 h), 32004 (60 h), 43500 (60 h), Independent  
Study/Honors Research (minimum 70 h which is approximately 2 semesters for 3 credits each)