UNCP Chemistry & Physics Department
Requirements for ACS Certification of B.S. Chemistry Graduates

NOTES:

1. This checklist correlates specific UNCP courses with the requirements of the ACS/CPT for certified B.S. graduates in Chemistry: https://www.acs.org/content/dam/acsorg/about/governance/committees/training/2015-acs-guidelines-for-bachelors-degree-programs.pdf. The number headings below refer to the corresponding section numbers in the Guidelines document, and the italicized narratives are excerpted from the ACS-CPT guidelines.

2. Students receiving ACS Certification must earn a **minimum average QPA of 3.00** in the courses listed below

5.2 **Introductory or General Chemistry** – CHM 1300, 1310, 1100 and 1110 (8 credit hours, including 60 lab contact hours)

5.3 **Foundations Course Work** – "*…Certified graduates must have instruction equivalent to a one-semester course of at least three semester credit hours in each of the five traditional subdisciplines of chemistry: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry…"*

ACS CPT Area	UNCP Courses	Credit Hours	Lab Hours (credit / contact)
Analytical Chemistry	❑ CHM 2270	4	1 / 45
Biochemistry	❑ CHM 3110 ❑ CHM 3120	3 1	n.a. 1 / 45
Inorganic Chemistry	❑ CHM 2260	4	1 / 45
Organic Chemistry	❑ CHM 2500 ❑ CHM 2520	3 1	n.a. 1 / 45
Physical Chemistry	❑ CHM 4100	4	1 / 45
	total	**19**	**5 /225**

5.4 **In-Depth Course Work** – "*…a minimum of the equivalent of four one-semester…in-depth courses [that]…correspond to at least 12 semester…hours…"*

Course Title	Course ID	Credit Hours	Lab Hours (credit / contact)	Check below the courses taken
Organic Chemistry II	CHM 2510	3	0 / 0	
Organic Chemistry II Laboratory	CHM 2530	1	1 / 45	
Biochemistry II	CHM 3210	3	0 / 0	
DNA Analysis	CHM 3240	1	1 / 45	
Research in Chemistry	CHM 3990	3 max	135 max	
Physical Chemistry II	CHM 4110	4	1/45	
Forensic Chemistry	CHM 4200	4	1 / 45	
Advanced Inorganic Chemistry	CHM 4260	4	1 / 45	
Instrumental Analysis	CHM 4270	4	1 / 45	
Special Topics in Chemistry	CHM 44XX	1-3	0 / 0	

5.6 **Laboratory Experience** – "*…400 hours of laboratory experience beyond the introductory chemistry laboratory. Laboratory course work must cover at least four of the five traditional chemistry subdisciplines and may be distributed between the foundation and in-depth levels…"*

- 225 hours via Foundation Course labs
- Minimum of 175 hours via In-depth Course labs
  (sum lab hours from checked courses in previous section) = _____

5.7 **Cognate Courses** – "*…course work equivalent to two semesters of calculus and two semesters of physics with laboratory. The Committee strongly recommends a calculus-based physics curriculum and study of multivariable calculus, linear algebra, and differential equations…"*

Course Title	Course Prefix/Number	Credit Hours
Calculus I and II	MAT 2210, 2220	8
Physics I and II	PHY 1500, 1510, 1560,1570 or PHY 2000, 2010, 2060, 2070	8

5.10 **Capstone Experiences –** "*…an integrative experience that requires [students] to synthesize the knowledge and skills introduced across the curriculum…these experiences may take many different forms [and will require students to] integrate knowledge, use the chemical literature, and demonstrate effective communication skills…"*

Signature of Department Chair confirming student has successfully completed a capstone experience:

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