

# THE UNIVERSITY OF PUGET SOUND

2019-2020 CURRICULUM GUIDE

**BIOCHEMISTRY – AMERICAN CHEMICAL SOCIETY CERTIFIED DEGREE**

DEGREE: BS

CONTACT PERSON: JEFF GRINSTEAD

## A suggested four-year program:

*Fall Semester Classes*

*Spring Semester Classes*

Freshman		Units	Units	
SSI 1	1	SSI 2	1	
CHEM 110/lab or 115/lab <sup>1</sup> (NS core)	1	CHEM 120/lab or 230/lab <sup>1</sup>	1	
MATH 180 (MA core)	1	MATH 181	1	
Approaches core	1	BIOL 111	1	
Sophomore		Units	Units	
CHEM 250/lab <sup>2</sup>	1	CHEM 251/lab	1	
PHYS 121/lab	1	PHYS 122/lab	1	
MATH 280	1	BIOL 212/lab	1	
FL (if needed) or Approaches core	1	FL (if needed) or Approaches core	1	
		CHEM 231 <sup>2</sup> (if needed)	0.5	
Junior		Units	Units	
CHEM 340	1	BIOL 213/lab	1	
CHEM 330, 341, or 420 <sup>3</sup> OR CHEM 300+/BIOL elective <sup>4</sup>	1	CHEM 330, 341, or 420 <sup>3</sup> OR CHEM 300+ / BIOL elective <sup>4</sup>	1	
Approaches core (if needed)	1	Approaches core (if needed)	1	
Elective	1	Elective	1	
Senior		Units	Units	
CHEM 460/lab	1	CHEM 461	1	
CHEM 490*	1	Elective	1	
CN core <sup>5</sup>	1	Elective	1	
Elective	1	Elective	1	

### NOTES:

Puget Sound requires a total of 32 units to graduate

**A minimum grade of C must be earned in all courses for the major.**

- 1) CHEM 110, 120 and 231 or CHEM 115 and 230.
- 2) Either CHEM 110/120 or 115/230 serve as prerequisites for CHEM 250. Biochemistry majors who take the 110/120 sequence also need to take CHEM 231. Students enrolling in CHEM 231 may have up to 4.5 academic units without incurring additional tuition fees.
- 3) CHEM 330 is offered in fall while 341 and 420 are offered in spring.
- 4) Take one additional unit of a CHEM 300- or 400-level elective or a BIOL elective (other than BIOL 361). If this course does not include a lab, an additional 48 hours of laboratory work (e.g., summer research) must be included as part of the ACS degree.
- 5) Of the three units of upper division coursework required outside the first major, the Connections course will count for one unless it is used to meet a major requirement.

\*Majors in biochemistry are encouraged to participate in undergraduate research in either the chemistry or biology departments. Upper-level Biology courses that are not used for the Biochemistry major will count as upper division courses outside the major.

# THE UNIVERSITY OF PUGET SOUND

## COURSE CHECKLIST

### CHEMISTRY (BS IN BIOCHEMISTRY – ACS CERTIFIED)

#### CORE CURRICULUM

UNIVERSITY CORE	CRS	TERM	GRADE
SSI 1			
SSI 2			
AR			
HM			
MA (MATH 180 or 181)#			
NS (CHEM 110 or 115)#			
SL			
CN			

#### KEY

SSI1= Seminar in Scholarly Inquiry1    AR= Artistic Approaches  
 SSI2= Seminar in Scholarly Inquiry2    HM= Humanistic Approaches  
 MA= Mathematical Approaches        CN= Connections  
 NS= Natural Scientific Approaches    FL= Foreign Language  
 SL= Social Scientific Approaches

#### **Foreign Language Requirement** (circle one)

- 1) Two semesters at 101/102 level or One semester at 200+ level
- 2) Proficiency exam (3rd year high school level or 1st year college level)
- 3) AP foreign language score of 4 or 5
- 4) IB higher level foreign language score of 5, 6, or 7

#### **Upper Division Level Requirement**

Three units at the upper division level outside the first major.

#### **KNOWledge, Identity, and Power Requirement**

One course. See Bulletin for details. Courses may also fulfill other program or graduation requirements.

#### MAJOR REQUIREMENTS

COURSE	UNITS	TERM	GRADE
CHEM 110, 120 and 231			
OR			
CHEM 115 and 230			
CHEM 250			
CHEM 251			
CHEM 340			
CHEM 460			
CHEM 461			
BIOL 111			
BIOL 212			
BIOL 213			
CHEM 490*			
300- or 400-level CHEM or BIOL elective**			
MATH 180			
MATH 181			
MATH 280			
PHYS 121			
PHYS 122			

**THIS FORM IS  
NOT AN  
OFFICIAL GRADUATION ANALYSIS**

#### NOTES

A minimum grade of C must be earned in all courses for the major.

#These major requirements may be used to fulfill university cores.

\*Majors in biochemistry are encouraged to participate in undergraduate research in either the chemistry or biology departments.

\*\*If this additional elective course does not contain a laboratory component, then an additional 48 hours of lab work (e.g. summer research) as part of the degree. BIOL 361 may not be used here.

Majors in Biochemistry may not earn additional majors or minors in Chemistry or Molecular and Cellular Biology.

Students must contact the Chemistry Chair to confirm that their particular plan satisfies the ACS certification guidelines.