Description:
The biochemistry concentration is designed to give students with concentrations in other disciplines a solid grounding in the basics of biochemistry in order to complement other BIS concentration areas. It is especially appropriate for concentrations in the various disciplines of life sciences, physics, engineering and geology, and for students planning careers in medical disciplines.

All courses, including pre/co-requisite courses, must be completed with a grade of “C” (2.00) or higher.

Requirements:
1. **Core 12 Hours**
   - BCH 461 General Biochemistry (3) *(Prerequisites: CHM 234 or 334; Co-requisite: CHM 341 or 346; Credit is allowed for only BCH 361 or 461)*
   - BCH 462 General Biochemistry (3) *(Prerequisite: BCH 461)*
   - BCH 467 Analytical Biochemistry Laboratory, L (3) *(Pre/Co-requisite: BCH 462)*
   - CHM 341 Elementary Physical Chemistry (3) *(Prerequisites: CHM 114, 116 or 118; CHM 231, 233 or 333; MAT 210, 251, 265 or 270; PHY 101, 112 or 131)*

2. **General Chemistry I 4 Hours**
   - CHM 113 General Chemistry I & Lab, SQ (4) *(Prerequisites: CHM 101 or ALEKS Math Placement Test with score of 50% or higher or Pre/Co-requisite: MAT 170, MAT 210, MAT 251, MAT 265 or MAT 270; Credit is allowed for only CHM 113 or CHM 117)*
   OR
   - CHM 117 General Chemistry for Majors I, SQ (3) *(Prerequisites: ALEKS Math Placement Test with score of 67% or higher or Pre/Co-requisite: MAT 270 (or 265); Credit is allowed for only CHM 113 or 117)*
   AND
   - CHM 111 General Chemistry Laboratory for Majors I (1) *(Pre/Co-requisite: CHM 117)*

3. **General Chemistry II 4 Hours**
   - CHM 116 General Chemistry II & Lab, SQ (4) *(Prerequisites: CHM 113 or CHM 117, or CHM 114. Credit allowed for CHM 115, 116 or 118)*
   OR
   - CHM 118 General Chemistry for Majors II, SQ (3) *(Prerequisites: CHM 117; MAT 270; Pre/Co-requisite: MAT 271; Credit allowed for only CHM 115, 116 or 118)*
   AND
   - CHM 112 General Chemistry Laboratory for Majors II (1) *(Prerequisites: CHM 111; Pre/Co-requisite: CHM 118)*

4. **Core Groups 8 Hours**
   Choose one group from the following:
   **Group 1**
   - CHM 233 General Organic Chemistry I (3) *(Prerequisites: CHM 116 or CHM 118; Credit allowed for only CHM 231, 233 or 333)*
   - CHM 237 General Organic Chemistry Lab I (1) *(Pre/Co-requisites: CHM 233; Credit allowed for CHM 237 or 337)*
   - CHM 234 Organic Chemistry II (3) *(Prerequisites: CHM 233 or CHM 333; Credit is allowed for only CHM 234 or 334)*
   - CHM 238 Organic Chemistry Lab II (1) *(Prerequisites: CHM 237 or 337; Pre/Co-requisites: CHM 234; Credit allowed for CHM 238 or 338)*
   **Group 2**
   - CHM 333 Organic Chemistry for Majors I (3) *(Prerequisites: CHM 116 or 118; Credit is allowed for only CHM 231, 233 or 333)*
   - CHM 337 General Organic Chemistry Lab I (1) *(Pre/Co-requisite: CHM 333; Credit is allowed for only CHM 237 or 337)*
   - CHM 334 Organic Chemistry II (3) *(Prerequisites: CHM 333; Credit is allowed for only CHM 234 or 334)*
   - CHM 338 Organic Chemistry Lab II (1) *(Prerequisites: CHM 337; Pre/Co-requisites: CHM 334; Credit is allowed for only CHM 238 or 338)
Notes:
- Students must complete a minimum of 28 credit hours including 12 of upper division hours for this concentration.
- All courses, including pre/co-requisite courses, must be completed with a grade of “C” (2.00) or higher.
- To enhance the understanding of the subject matter, the selected courses are sequential in nature and require certain prerequisites. Consequently, students should carefully note the semester in which any of these courses are offered.
- To ensure continuity of content students are strongly encouraged to take chemistry courses + labs at the same campus. Inappropriate pairings: Chemistry at West campus + Chemistry at Tempe campus.
- Students are encouraged to consult a Department of Chemistry and Biochemistry academic advisor.
- Students may not pair the Biochemistry concentration with the Chemistry concentration.

What you will see on your DARS:

CLAS 12 Upper Division Concentration Check  
College of Liberal Arts & Sciences  
NOTE: 12 upper division hours in CHM or BCH required.

- 1) NEEDS: 12.00 HOURS

BIOCHEMISTRY Concentration  
College of Liberal Arts & Sciences

NOTE: Grade of C (2.00) or better required.  
Minimum 12 upper division hours required.

---> NEEDS: 28.00 HOURS

- 1) CORE - 12 hours  
NEEDS: 12.00 HOURS  
COURSE LIST: BCH 461 BCH 462 BCH 467 CHM 341

- 2) GENERAL CHEMISTRY I - 4 hours  
NEEDS: 4.00 HOURS 1 SET  
COURSE LIST: CHM 113 CHM 117(FA10 or after) & CHM 111(FA10 or after)

- 3) GENERAL CHEMISTRY II - 4 hours  
NEEDS: 4.00 HOURS 1 SET  
COURSE LIST: CHM 116 CHM 118(FA10 or after) & CHM 112(FA10 or after)

- 4) CORE GROUPS - 8 hours  
Select one course group:  
1) CHM 233 & 237 & 234 & 238  
2) CHM 333 & 337 & 334 & 338  
NEEDS: 8.00 HOURS  
COURSE LIST: CHM *33 & CHM *37 & CHM *34 & CHM *38
Bachelor of Interdisciplinary Studies (BIS)

All BIS students are required to complete a 12 credit hour BIS core.

1) BIS Core 12 Hours Required
   BIS 301 Foundations of Interdisciplinary Studies, L (3)
   BIS 302 Interdisciplinary Inquiry (3)
   BIS 401 Applied Interdisciplinary Studies (3) (requires application)
   BIS 402 Senior Seminar (3)

   For additional BIS major requirements, course descriptions, required prerequisites, application deadlines, and other important information regarding the Interdisciplinary core go to https://sls.asu.edu/node/300.

BIS Advising https://sls.asu.edu/node/49#is

Downtown Phoenix
   University Center (UCENT) 300
   602-496-4000

Tempe
   Undergraduate Academic Services Building (UASB) 129
   480-965-4464

Polytechnic
   Santa Catalina (SANCA) 233
   480-727-1526

West
   Faculty Administration Building South (FAB S) 101
   480-727-1526 (First Time Appointments)
   602-543-4231 (Continuing BIS Students)