



# Cuyahoga Community College & West Virginia University

Associate of Science A.S. leading to  
Bachelor of Science in Chemistry B.S.  
Suggested Plan of Study



Cuyahoga Community College	Hours	WVU Equivalents	Hours
Year One, 1 <sup>st</sup> Semester			
ENG 1010/101H – College Composition I/Honors	3	ENGL 101 – Intro to Composition and Rhetoric	3
CHEM 1300 & CHEM 130L, or CHEM 130H – General Chemistry I and Lab	5	CHEM 115 & CHEM 115L + CHEM 1TC – Fundamentals of Chemistry I & Lab	5
MATH 1610/161H – Calculus I	5	MATH 155 + MATH 1TC – Calculus I	5
OT 36 Arts & Humanities	3	Arts & Humanities Elective	3
<b>TOTAL</b>	16		16
Year One, 2 <sup>nd</sup> Semester			
ENG 1020/102H – College Composition II/Honors or ENG 2151 – Technical Writing	3	ENGL 102 – Composition, Rhetoric, and Research or WRIT 305 – Technical Writing	3
CHEM 1310 & CHEM 131L, or CHEM 131H – General Chemistry II and Lab	5	CHEM 116 & CHEM 116L + CHEM 1TC – Fundamentals of Chemistry II & Lab	5
MATH 1620/162H – Calculus II	5	MATH 156 + MATH 1TC – Calculus II	5
OT 36 Social and Behavioral Sciences Elective	3	Social & Behavioral Science Elective	3
<b>TOTAL</b>	16		16
Year Two, 1 <sup>st</sup> Semester			
PHYS 2310 – General Physics I	5	PHYS 111 & PHYS 111L + PHYS 2TC – General Physics I	5
CHEM 2300 – Organic Chemistry I	5	CHEM 233 & CHEM 233L + CHEM 2TC – Organic Chemistry I & Lab	5
OT 36 Social and Behavioral Sciences Elective	3	Social & Behavioral Science Elective	3
MATH 2310 – Calculus III <sup>(Elective)</sup>	4	MATH 251 – Multivariable Calculus <sup>(Required)</sup>	4
<b>TOTAL</b>	17		17
Year Two, 2 <sup>nd</sup> Semester			
PHYS 2320 – General Physics II	5	PHYS 112 & PHYS 112L + PHYS 2TC – General Physics II	5
CHEM 2310 – Organic Chemistry II	5	CHEM 234 & CHEM 234L + CHEM 2TC – Organic Chemistry II & Lab	5
OT 36 Arts & Humanities	3	Arts & Humanities Elective	3
Elective	2	Elective	2
<b>TOTAL</b>	15		15
<b>West Virginia University</b>			
Year Three, 1 <sup>st</sup> Semester		Year Three, 2 <sup>nd</sup> Semester	
CHEM 215 & CHEM 215L – Intro Analytical Chemistry & Lab	4	AGBI 410 – Introductory Biochemistry	3
CHEM 335 & CHEM 335L – Methods of Structure Determination	4	CHEM 348 – Physical Chemistry 2	3
CHEM 346 & CHEM 346L – Physical Chemistry 1 & Lab	4	CHEM 348L – Physical Chemistry 2 Lab	2
General Elective	4	CHEM 322 – Intro to Inorganic Chemistry <sup>(SP Only)</sup>	3
		General Elective	3
<b>TOTAL</b>	16	<b>TOTAL</b>	14
Year Four, 1 <sup>st</sup> Semester		Year Four, 2 <sup>nd</sup> Semester	
CHEM 402 <sup>(Capstone)</sup>	2	CHEM 310 & CHEM 310L – Instrumental Analysis & Lab	4
CHEM 422 <sup>(Fall Only)</sup> – Inorganic Chemistry 2	3	Upper-Division Chemistry Elective (2)	3
CHEM 422L <sup>(Fall Only)</sup> – Inorganic Chemistry 2 Lab	2	General Elective or Minor Course (3)	3
General Elective or Minor Course (1)	3	General Elective or Minor Course (4)	3
General Elective or Minor Course (2)	3	General Elective or Minor Course (5)	3
General Elective	1		
<b>TOTAL</b>	14	<b>TOTAL</b>	16

Course sequence may change based on the individual needs of the student and schedule type required.

New college students may be required during their first semester to participate in GEN 1070, First Year Success Seminar, a one credit hour course. See a Tri-C Counselor for details.

This represents an example of suggested courses to complete the Associate of Science to continue for a bachelor's degree, which must total at least 60 semester credits and includes 36 Ohio Transfer 36 (OT36) credits which are approved Tri-C general education requirements. OT36 details can be found at <https://www.ohiohighered.org/Ohio-Transfer-36>. Students should work closely with advisors at both institutions to discuss options.

Students must complete both CHEM 1300 & CHEM 130L (CHEM 115 & CHEM 115L) with a grade of C- or better to be admitted to the Chemistry program when transferring to WVU.

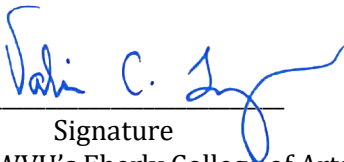
CHEM 191 is recommended by the Chemistry department as a helpful addition.

\*CHEM 402 is currently offered in the Fall and Spring semester.

Students transferring to West Virginia University with an Associate of Arts or Associate of Science degree will have satisfied the General Education Foundation requirements at WVU.

Students who have questions regarding this articulation agreement or the transferability of coursework may contact the WVU Office of the University Registrar. All other questions should be directed to the WVU Office of Admissions (304-293-2121).

The above transfer articulation of credit between West Virginia University and Cuyahoga Community College, is approved by the Dean, or the Dean's designee, and effective the date of the signature.

Valérie Lastinger		11/1/2023
_____ Print Name	_____ Signature	_____ Date

Valerie Lastinger Ph.D. Associate Dean for WVU's Eberly College of Arts & Sciences